



CONTRACT SERVICES
PROJECT MANAGEMENT
PERMANENT PLACEMENT

Mr. Paul S. Kenney
Project Engineer
Lockheed Martin Information Systems
12506 Lake Underhill Road, MP 1270
Orlando, FL 32825-5002

cc: John Hartman
Randy Dougherty

August 15, 1997

Dear Paul,

Thank you for the direction provided during our conversation with you Wednesday. We will proceed in developing MasterLink© with the following architectural components:

<u>Client</u>	<u>Server</u>
Windows NT	Windows NT
Visual Basic Interfaces	C++ Application Processes
	ILOG Rules (Inference Engine)
	Objectstore Database (OODBMS)

Should you or Randy wish to change any of these we need to know it as soon as possible.

This guidance and agreement on this issue was very important to us so we develop coding in the right direction without wasting time going down a wrong pathway which we can ill afford to do.

Yes, we are looking forward to getting on contract in the near future so we are able to meet the requirements you have for your project. Doing so involves major changes for us at MasterLink that we discussed. Your assistance is needed for us to be able to respond appropriately and professionally as you would expect.

I met with John yesterday and he will be in touch with you next week to advise when you will receive the express package.

Regards,

A handwritten signature in black ink, appearing to read "Kent A. Weisner".
Kent A. Weisner

Subject:

Date: Wed, 27 Aug 97 15:30:00 PDT

From: "Hartman, John" <John_Hartman@tvratings.com>

To: "ATEK" <atek@gdi.net>, "Garry L. Fenimore" <mlink@mail.gte.net>

Kent & Garry,
Here is the text from my cover letter and the table of contents for the
package. Looks like we ship on Thursday night.
John

August 27, 1997

Mr. Randy Dougherty
Manager of Logistics Information Systems
Lockheed Martin Information Systems
12506 Lake Underhill Road
MP 1270
Orlando, FL 32825-5002

Dear Randy,

Enclosed you will find the work we have done to enhance the MasterLink concepts based on feedback received at our meeting of May 30. This consists of some additional classes added to the MasterLink class models, some additional use cases, and some suggested initial interfaces to support those use cases. These use cases are in support of the requests for examples of how "what if" analysis and reporting would be implemented. This was one of the major feedback requests we received at our meeting. The enclosed documentation is limited to only these new design artifacts, but is representative of that which we have produced for all classes and use cases in the MasterLink design. See the enclosed table of contents for the enclosed documentation.

A second category of feedback we received was in regard to a working prototype. We have proceeded to build a working prototype development environment. This is based on Windows NT, C++, Visual Basic, ODI ObjectStore, and ILOG libraries. We will soon be ready to discuss what initial MasterLink functionality should be included in the first functioning deliverable to be based on this architecture.

A third request we heard was in regard to the "ease of use" associated with the use cases for maintaining Policy instances. We have not had time to suggest a response to this explicitly, but we feel confident we will be able to provide a solution.

We feel that this deliverable should provide the confidence in MasterLink to deliver state of the art solutions to work management requirements that will benefit the needs of Lockheed Martin Information Systems and their customers. We look forward to your response to this submission.

Yours truly,

John D. Hartman
Chief Technical Officer

cc: Paul S. Kenney

Lead Software Engineer

enclosures

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- ? Use case diagram for the "Maintain Mission" use case.
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? Initial class specification for the "LevelsModificationControl" class.
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MasterLink

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Randy Dougherty
Manager, Logistics Info Systems
Lockheed Martin Information Systems
12506 Lake Underhill Road, MP 1270
Orlando, FL 32825-5002

September 10, 1997

Dear Randy,

During our telecon last week you said, "What is missing for me is a verbal description from A to Z as to what this thing is going to do." Attached is a confidential summary prepared for you.

We believe our use of the word policy has caused some confusion and have substituted "Work Process Specifications" in its place.

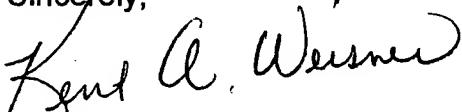
See page two and three covering All Work Environments and Domain Specific Elements. These two pages have definitions on them essential to MasterLink©.

→ This information was given to Greg Howard several months ago and may not have been passed along to you.

Gary Fenimore and I would like to have a telecon with you tomorrow in the p.m. or at your earliest convenience. I would like to have a business discussion as well.

Thank you.

Sincerely,



Kent A. Weisner

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Mr. Richard Licursi
President
Pheonix Wireless Group, Inc.
2300 Maitland Center Parkway, Suite 200
Maitland, FL 32751

October 15, 1997

Dear Dick,

This is to confirm my requested appointment with you via Lisa Lill. I will be there on Monday morning, October 20, 1997 at 10:30 a.m. in your office. It will be fun to catch up as it appears no grass has grown under our feet.

We believe we may have something very complimentary to what you are doing. A product we are developing, MasterLink©, uses wireless client server technology to link management and a mobil work force to automate and simplify work (the performance of all phases of the life cycle of a job). It will change the way work is done in the world and is applicable to nearly all work domains. Wireless communication is a key to our system.

MasterLink© is in last phase development and I would appreciate you telling me about Columbia Capitol Corporation. We have been boot strapping and it is time for final phase and perhaps a strategic partner to maximize the opportunity we have created.

I have presented this to Phil Crosby and he has endorsed it as, "a computer era breakthrough that lets management manage while the work force is fully utilized".

Looking forward to meeting with you.

Sincerely,

A handwritten signature in black ink that reads "Kent Weisner".

Kent A. Weisner
President

NON-DISCLOSURE AGREEMENT

AGREEMENT by and between MASTERLINK CORP., Garry L. Fenimore, President, 716-44th St. W., Bradenton, Florida 34209, and A-TEK CONSULTANTS, INC., Kent A. Weisner, President, 3649 All American Blvd., Orlando, Florida 32810-4726 (and any successive legal d.b.a. entity that they are principally involved) and,

(hereinafter called "Recipient")

IN CONSIDERATION of MasterLink Corp., hereafter referred to as MC and A-Tek Consultants, Inc., hereafter referred to as ACI, furnishing Recipient with certain product, financial, and other valuable information (hereinafter called "information") pertaining to the operation of the business of MC/ACI and marketing of its products and services, which information is proprietary to MC/ACI and acknowledged as such by Recipient, the parties do hereby agree as follows:

1. Recipient will hold in confidence the information furnished to it by MC/ACI under this agreement and will not distribute, disclose, or disseminate such information in any way to any person, corporation, association or governmental entity without MC/ACI's prior written consent. In addition, Recipient will not without MC/ACI's prior written consent, utilize such information in the design, development, production, or provision by or on behalf of Recipient, or any product or service, similar product or service, to which the information may be applicable. The obligations and restrictions imposed by this provision are limited as follows:

Recipient shall not be liable for disclosure or use of any such information which:

- a) is or becomes available to the public from a source other than MC/ACI;
- b) is lawfully obtained by Recipient from a party other than MC/ACI;
- c) is known by Recipient prior to the disclosure thereof to Recipient by MC/ACI; and,
- d) is released upon the prior written consent of MC/ACI.

Non-Disclosure Agreement con't

2. No license to Recipient under any patents, copyrights or trademarks is granted or implied by conveying any information to Recipient and none of such information which may be transmitted shall constitute any representation, warranty, assurance, guarantee or inducement by MC/ACI to Recipient with respect to the infringement of patents, copyrights or trademarks or other rights of others.

RECIPIENT

Company

Signature

Printed Name

Title

Date

MASTERLINK CORP.

Signature

Printed Name

Title

Date

A-TEK CONSULTANTS, INC.

Signature

Printed Name

Title

Date

MasterLink

Work Automation & Simplification

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The problem: Mobil workers of the world cannot access the information needed to complete work assignments efficiently. Existing data centric systems tend to reduce management's ability to properly influence workflow process.

The solution: MasterLink©. This software system provides mobil workers with wireless access to information needed to perform job tasks (work) optimally in the most efficient, cost effective manner. MasterLink© automates and simplifies work using an event driven, knowledge based and process centered system.

MasterLink's interactive software provides real time information, where and as needed. Job tasks are completed more effectively and efficiently. This achieves the primary purpose of any enterprise. The software is a management tool. It controls costs, permits simulation ("what ifs"), advantageously alters systems behaviors, and keeps score. Information goes in from the bottom up (work status) and the top down (policy, rules, & job state, target and task definitions). The system processes are constantly updated in real time, so everyone knows what to do. Everyone in the enterprise is able to judge the effectiveness of their contribution. Management can continually evaluate overall achievement of stated objectives and goals.

Generic by design, MasterLink© crosses all lines and is applicable wherever work is performed. It is universal and opportunity is world wide in improving man's ability to perform work, as we know it.

MasterLink© evolved by two fundamental disciplines; object oriented framework technology and behavior controlled agent technology. These drive our definition & rules based expert system used to control job state transitions.

To accommodate transition and utilization of existing legacy systems MasterLink© has developed a slide in intelligent layer that integrates with existing MIS to raise current systems to a higher level of performance.

MasterLink© represents a distinct philosophy of organizational workplace management and its core is facility management (facility being defined as any infrastructure, physical or logical, that enables enterprise activities). Enterprise endeavors are viewed as "chains of activity". These chains have specific beginnings and endings that, depending on how well they are coupled with each other, are directly related to overall success of the enterprise.

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MasterLink® is the work process improvement company.

We are re-engineering the work process and have developed MasterLink® to do as its name implies—be the "MASTER LINK" providing both management and the work force with the information they need to get the job done right.

Unfortunately, growing numbers of the work force (mobile and stationary) are not getting useful, accurate and up to date information. Worse, workers tend to get unfiltered information (data overload). Systems are data centric and that is a big problem.

MasterLink® is changing this with its work process automation simplification technology. MasterLink® is a process-focused software application used to manage the activities of stationary or mobile skill workers that:

- **REDUCES SYSTEM IMPLEMENTATION** and customization costs by utilizing industry-specific standardized data definitions
- **AUTOMATES SUPERVISION** (planning, scheduling and dispatching)
- **LINKS** skill workers to all job information when they need it.
- **AUTOMATES** field data reporting
- **ENABLES** management control of skill worker activities, based on policy. Policy is the set of rules that management uses to manipulate the system behavior to achieve specific outcomes.
- **INFORMS/ENABLES/ & KEEPS SCORE** for corporate management by providing superior feedback capabilities

MasterLink® delivers these skilled work force optimizing capabilities with unique *simplicity*. We have software tools to use in defining each domain requirement and specification. Our engineering design and documentation has been completed in great detail which will enable us to deliver on time or ahead of schedule and often under budget. Only final coding remains to complete the MasterLink work process Management System.

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CONFIDENTIALITY STATEMENT

The information, data and drawings embodied in this business plan are strictly confidential and are supplied on the understanding that they will be held confidentially and not disclosed to third parties without the prior written consent of MasterLink Corp.

MEMORANDUM OF RISK

The following business plan represents management's best current estimate of the future potential of the business. It must be recognized that no business is free of major risks and few business plans are free of errors of omission or commission. Therefore investors should be aware that this business has inherent risks that must be fully evaluated, discussed with management and experts fully capable of interpreting the information prior to any investment.

Executive Summary

Company Name: MasterLink Corporation
Contact: Kent Weisner
Address: 3649 All American Blvd.
Orlando, FL 32810-4726

Telephone: (407) 299-3900
Fax: (407) 299-8200
E-mail: atek@gdi.net

BUSINESS DESCRIPTION

MasterLink® is a management services company. Its comprehensive software systems can be utilized by any business organization to achieve greater productivity. MasterLink® systems enhance the capacity of workers to perform assigned tasks. The system defines the job, provides the worker with all necessary information when and as needed and lets the worker know how well the job was performed. MasterLink® automates supervision, automates field data reporting and in addition to keeping score, lets management manage more effectively.

MasterLink® is a computer software development company specializing in work flow decision automation and job task simplification. The MasterLink® software systems include a sophisticated tool box that quickly and efficiently identifies domain specifications. This results in rapid implementation of MasterLink®'s intelligence layer into its own or into an existing database.

MasterLink® was founded in 1994 by Garry Fenimore, John Hartman and Kent Weisner. The principals recognized the need in the work place for an object oriented designed software system responding to essential information transfer directly to the individual performing work. The MasterLink® system focuses on the support and feedback process at the point of delivery of work.

MasterLink® was formed as a "C" corporation.

CURRENT POSITION AND FUTURE OUTLOOK

1. MasterLink®'s software system is unique in the industry. It is the first object oriented system that defines work through policy. It includes rules essential to transfer information in support of job tasks and measures effectiveness and contribution to the success of the enterprise. The applications for MasterLink®

are virtually universal. Wherever work is performed and the related tasks require information essential for the completion of work, MasterLink® will be in demand.

2. This business plan will focus on facilities and maintenance management. MasterLink© can be applied in any domain requiring work. Management personnel with facilities and maintenance responsibilities are constantly in the hunt for systems that improve process and procedures. Increasing the useful life of assets, simplifying work, automating work flow decision making and setting the stage for productivity improvement, are all part of the MasterLink© benefit package.
 - a. MasterLink® can solve facilities and maintenance management problems by:
 - accurate, two-way, rules-based data communication
 - coordination of best practice methods at the point of delivery of the work or service.
 - carefully defined work expectation and immediate feedback on individual performance sets up an environment for productivity gain. Unit cost per task performed is reduced.

As is frequently the case, many organizations are "data rich." MasterLink© through its "Intelligence Layer" can bridge the various data arrays in data centric systems. It then extracts the necessary detail to enable its own active agents to automatically perform the tasks and keep score for the total benefit of the enterprise.

3. Data processing software is on an ever increasing sales demand curve. To our knowledge, MasterLink® is the only supplier of software "that lets management manage the operation while the work force has the information to be fully utilized." A quote from Philip Crosby, author. Mr. Crosby is recognized worldwide as the leading voice in quality management and management strategies. He has endorsed our MasterLink® product.
4. The skill sets of our principal developers are a primary asset (see resumes). The design and documentation for the system is complete. When the core for the system has been fully coded (programmed) MasterLink® will own and control the key element of the software package. This coupled with a tool box that quickly specifies domain application requirements makes MasterLink® even more attractive product.

5. Secure last stage development resources to complete software core coding with a key strategic partner or angel financing, thus replacing current boot strapping approach. This alteration would significantly accelerate completion of the coding project. The company will then seek a value delivery partner within each work domain. MasterLink® will roll out its product for application in other domains such as aerospace, telecommunications, utilities/transportation, and manufacturing.
6. We would prefer to have a single strategic partner who is also a customer/user of MasterLink® or angel investors to enable us to rapidly move to product completion and market penetration. Funds will be used to complete the intelligent layer and coding of the core as well as support for the initial marketing campaign and rapid roll out into other vertical markets (see page 5 use of funds). MasterLink® will enter into value added delivery relationships for each of the targeted industry domains such as health care.

MANAGEMENT AND OWNERSHIP

Garry Fenimore has 11 years experience as a technical facility specialist. He has served as operation auditor focusing on energy and maintenance management. His employers have included the Siemens Corporation. His experience with computer aided facilities management (CAFM) and computer aided maintenance management (CMMS) led him to the conclusion that these systems were data centric, inhibited management innovation and led to increases in departmental costs. This led him to the creation of MasterLink®.

John Hartman is chief technology officer for MasterLink Corp. He brings 15 years of functional systems analysis, design, and project management skills. He is currently serving as Information Systems Director for a Fortune 500 company. As an object-oriented programming specialist he is the "object evangelist" for methodology and technique in all production areas of MasterLink®. Additional support is provided by Steven Beaver an object oriented software development specialist. He has designed, developed and implemented middleware which supports the basic functionality required to implement Business Applications in an object oriented environment. His work for The Technical Resource Connection, Inc. helped result in the sale of TRC to Perot in 1996. He brings expertise in Object Oriented and Artificial Intelligence Technology to MasterLink®.

Kent Weisner is in charge of business development for MasterLink®. He brings 20 years of successful business management, business ownership and

entrepreneurial and start up business experience. Typically, he has total dedication and commitment to achieve MasterLink®'s objective.

The principals of the company are supported by a number of highly skilled individuals possessing both technical and marketing capabilities. A-Tek Consultants, Inc., is a supplier of professional software services. This business is owned by Mr. Weisner and will be a source of support personnel for MasterLink®.

2. The above management team also owns the business.

UNIQUENESS OF THE SERVICE

1. We have the ability to rapidly identify and specify the "work" requirement of a domain and then provide the solution, the MasterLink® as its name implies to do the work efficiently and effectively. MasterLink® automates supervision through policy "rules" inclusion and simplifies work by providing real time information to the work force. This eliminates costly non-value added activities and allows the work force to be fully utilized. The system monitors the enterprise, monitors itself and is designed to be self-improving. MasterLink® is the first automated and simplified work process system whose design provides for universal applicability to all work domains. (Very little customizing is required) The software system improves productivity at all work levels. The markets served by MasterLink® are universal.

MasterLink® is perceived as a one of a kind software developer. Its image is reflected in the quality and ability and capability of its personnel. The company is located in Central Florida. Product pricing is determined by the complexity of the domain in which the software is to be installed. The way work is done will be changed (for the better) by the installation of MasterLink® systems. MasterLink® is affiliated with A-Tek Consultants, an established software contract services company. A-Tek is a supplier of permanent and contract personnel.

A-Tek/MasterLink® has program support from business notables such as Philip Crosby (*Quality is Free*) and Peter Schutz (former CEO of Porche, A.G.). We will be placed on Mr. Crosby's web site page. Much of our other advertising will be word of mouth

2. Our extensive market research has failed to find any organization with a software package that remotely matches the strength, features and power of MasterLink®.

FUND'S SOUGHT AND USAGE

-
1. We seek strategic partnerships in each target domain. The partner becomes the domain expert for that market area.
 2. Participation and partnership structure is negotiable.
 3. The partner will be expected to fund the necessary coding (programming) to complete the software preparation for that particular domain application.

EXIT

1. Liquidity for the investor can be expected following an anticipated IPO. The timing is dependent on product roll out and initial sales. The IPO is expected to be placed within 16 to 30 months from the date of funding.
2. The investors will have a choice of cashing out by "putting" his/her stock at the time of public offering or on the open market any time thereafter.

FINANCIAL SUMMARY

MasterLink® Corporation, in the next five (5) years, will conservatively create a revenue stream of \$200 million with a 20% net profit.

Detailed financial information for 1 year development and 5 year roll out numbers are available. The above numbers are achieved within 2 to 4 work domains and there are between 12 and 20 domains that we will serve aggressively.

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MasterLink©, the company, was founded to produce object oriented frameworks for the automation of mobile work force management.

The vision is based on three major components:

- The implementation, in software, of the real world active agents involved in all phases of the life cycle of a job. These include abstractions for all levels of the enterprise, e.g. Executives, Managers, Planners, Supervisors, Mobile Workers, and External Resources. These agents govern all aspects of work flow. This includes such functions as the automatic generation of planned jobs, the scheduling and assignment of jobs to the optimum resources, the dispatching of work to mobile workers, the collection of status information from the field force, and the ability to react to unplanned event jobs.
- The user defined control of the MasterLink© active software agents through the establishment of sets of rules and definitions called Work Process Specifications (which we call "Policy"). Instances of Work Process Specifications (Policy) provide the basis for a rules based expert system, which implements the decisions associated with the various state transitions within a job's life cycle. Executives, through Work Process Specifications (Policies), can have a direct effect upon the behavior of the system agents and in turn the mobile work force, providing yet another link in the work delivery chain. This will empower Executive management to be able to adjust and adapt work flow process specifications(policies) and procedures through the system, and get a tangible measurement of the results of management strategies. Extensive management reporting, including "what if" analysis will aid managers in making Work Process Specifications (Policy) decisions.
- The use of wireless client server technology to establish the Link between the mobile worker and the resources of the knowledge base environment resident on the server. This active link will allow for delivery of just in time information to the mobile worker, and also for timely delivery of work status data back to the central server.

These three major components establish the MasterLink© between management and a mobile work force, through the system and its knowledge base. This will result in the following benefits being realized:

- Increased efficiency in every phase of a job life cycle.
- Reduced personnel requirements, allowing for expanded work load or redeployment of resources.
- Better equipped mobile work force.
- Improved mobile work force moral.

- More timely availability of information at all levels of the resource hierarchy.
- Improved customer satisfaction.
- New ability to implement a job management strategy based on analysis of results, heretofore not possible with current technology.
- Facilities Maintenance Domain Differentiators.

The following represents some of the concepts to be implemented for a Facilities Maintenance vertical domain. Most of the concepts will apply to many other mobile work force applications.

Initiation

Implementing a maintenance management system typically involves defining a coding structure into which all relevant work targets to be managed by the system must be catalogued, and into which the definition of tasks for those targets must be entered. MasterLink© has incorporated a flexible coding structure for users based on the Construction Specification Institute standard. This is the standard used in architectural design when facilities are specified in formal blueprints and schematics, and provides a coded structure and descriptive data for all typically managed facility targets. This is implemented as a Meta Model which can be extended by the user to define new categories of work targets and their relationships to other categories. In addition to pre-defined categories of work targets, a similar model provides a pre-defined collection of tasks to be applied to related categories of targets.

User Defined Policy / Effectiveness Reporting

The ability to define the rules and constraints associates with the behavior of the active agents associated with the management of jobs and resources in the system is unique to MasterLink©. This includes the ability to generate "what if?" analysis, and various management reports reflecting the effectiveness of a given work management strategy. Additional management reporting allows for assessment of the performance of resources and targets.

Planning

Generation of planned maintenance jobs and planned work schedules based on a set of rules defined by instances of Work Process Specifications (Policy) are handled by a system agent. The agent can be run in planning mode for forecasting, or in standard mode which produces actual work.

Scheduling

The assignment of a Resource to a task/job based on a set of rules and constraints defined by instances of Work Process Specification (Policy) are handled by a system agent. This includes the creation/update of regular shift oriented Work Schedules for groups of Resources known to the system. The agent can be run in planning mode for forecasting, or in standard mode which produces actual work. The agent is invoked automatically based on events occurring on the system having to do with job states. Examples of job events

are: an assignment may be needed for an unplanned task/job that has just been created, or a reassignment may be needed if a currently assigned Resources availability changes.

Dispatching

The delivery of task/job assignments on work schedules to the assigned resources is handled by a system agent. This supports a store and forward mechanism for server to client delivery.

Work Distribution

Allows for planned tasks/jobs to be distributed over cyclical periods of time, and across groups of locations where the targets of work exist. This insures that all locations are visited on a regular basis, allowing for better and more timely information about the state of targets at those locations.

This is a partial list of the features distinguishing MasterLink© from other mobile work force applications, and additional information can be provided on request.

Meeting with Richard Ficuci 10-20-97 with K. Weiser
CEO & Chairman of Phoenix Wireless Group

I am to call Richard on Tuesday 10-28-97 to set a meet.

He is seriously considering pushing MasterLink himself personally.

This company is emerging and will more than double from
\$7,000,000 to approx 16 or 17 million next year. Phoenix info sent to
you 10-21-97 by Phoenix.

The legal attorney Bill Grinnon same one Crosby uses that Fred & I
met with a few months ago.

Richard wants to see the following things from us:

1. Competitive Analysis
2. How we will utilize funds
3. More detailed business plan including providing
the rest of financial detail.
4. He wants to meet you guys.

He feels there may be a fit later for MC with Phoenix Wireless.
He has suggested to keep MC on its own for now, with him
investing. He has another co. Trident.

"I have seen stuff similar I think." "How is it different?"

"I need to understand how you are different."

He has raised 18,000,000 venture capital for Phoenix and the
company is evaluated @ \$40,000,000 now.

Richard suggested he could get us (Fred & us) with the right venture capital
people.

10-30-97 Richard discuss many new issues
Provide next detailed

Detailed understand how different

① Constitutive analysis?

④ Meet your guys. Call 1 week from tomorrow. ^{to start.}

All three next week.

② How to spend it? Funds utilization

③ More detailed Business Plan.

Treat another Co.

NC keep on its own.

Per Richard friends I have seen stuff similar, how is it different?

(6-31-97)

Will get back to us on Wed. 11-5

can easily make it more simple just like Phil Crosby suggests in his endowment letter.

MasterLink

Work Automation & Simplification

CONFIDENTIAL

MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

Mr. Richard Licursi
Chairman and C.E.O.
Phoenix Wireless Group
2300 Maitland Center Parkway, Suite 200
Maitland, FL 32751

October 31, 1997

Dear Richard,

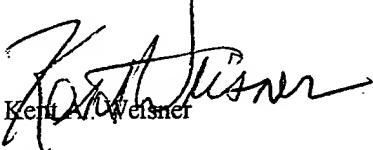
This is not trick or treat! Happy Halloween!

This business plan is in development and you are getting first look it will be revised and delivered when we meet the week of November 9, 1997 or sooner if you wish.

As you can appreciate, this business case is evolving and your input will be valuable. When you look over the financials note that I have included ranges I, II, and III. Units sold in each are 28,000, 40,000, 100,000 over a 5 year period. In the U.S. alone there are 20 million mobil workers and they need help. The market is definitely there. If my arithmetic is correct $\frac{1}{2}\% = 100,000$ and our range I at 28,000 units makes for a nice business. However, we are not going to be satisfied at that level. Yes, we are excited about the challenge and the opportunity that lies ahead for MasterLink!

We are looking forward to meeting with you.

Sincerely,


Kent A. Weisner

Enc. Business plan (17 pgs.), MasterLink Products Application Overview (pgs.5-9 from white paper)
Pro Forma Financial Assumptions – Income Statement, Cash Flow Statement, Unit Revenue Schedule
(15 pgs.)
Physical Architecture for a Distributed Workflow Management System (1 page)
MasterLink Presentation Slides (5 pgs.)

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1. 0 Executive Summary

MasterLink is event driven software that focuses on getting essential information to and from the individual performing work. Task performance is recorded in real time. Both the worker and the enterprise are regularly made aware of expectations and results. MasterLink keeps score and guides job management processes toward the most cost-effective channels. The operating system permits more effective management direction. MasterLink operates via the use of agents. These agents control the behavior of the system automatically following the policy "rules" that influence outcomes within the enterprise. MasterLink is particularly useful in remote and/or mobile worker environments. The open architecture of the MasterLink design avoids the current and increasingly frequent difficulties in planning scheduling and dispatching functions experienced by common data centric work management software systems. MasterLink is knowledge-based. The software incorporating essential elements of Object Oriented Technology and Advanced Artificial Intelligent Agents to achieve its seamless functionality. MasterLink provides an infrastructure necessary for an enterprise to achieve a higher level of sophistication in its operations. Software development cost is escalating rapidly. The code reuse inherent in the MasterLink design significantly reduces this cost spiral.

*and process oriented.
Object
Organization
Reuse*

1. 1 Objectives

1. Obtain \$2,500,000 funding for initial startup costs and completion of last stage development coding of MasterLink core software in Object Oriented Frameworks that provides generic (universal) code that is 85% reusable in multiple work domains.
2. Complete intelligent layer of core software (6 months).
3. Completion of the core software coding (18 months).
4. Achieve first year sales revenue of \$1,775,000 in 1999.
5. Achieve second year sales revenue of \$8,480,000 in 2000.
6. Achieve third year sales revenue of \$20,425,000 in 2001.
7. Achieve breakeven within 18 months of initial product rollout in the year 2000.

1. 2 Mission

MasterLink is the work process improvement company. Our software is dedicated to automating and simplifying work by providing both management and the work force with interactive real time information they need, at the point of work or service, to get the job done right. Currently millions of mobil workers don't have the information they need to do their jobs efficiently. MasterLink's software system changes all of this by getting workers (mobil or stationary) the information they need so everybody knows what to do. Generic by design, MasterLink is applicable in domains wherever work is performed. The company is committed to improving man's ability to perform work worldwide. We are

Strength?

confident we will generate an attractive rate of return for our investors and be able to continue developing unique solutions for our customers.

1.3 Keys to Success

The keys to success in this business are:

1. To have a saleable product. Our marketing efforts to date have consisted of presenting the design and concept of MasterLink to a wide variety of business organizations. Response has been extremely favorable.

Among those clients we have received offers of beta site, product utilization, and intent to purchase when available. Examples of intent to purchase include clients from medical facilities, aerospace, and the mobil worker environment.

2. In advance of product roll out it will be necessary to develop a strong field support organization.

3. It is essential that MasterLink convey high product reliability with a strong responsive technical support team.

2.0 Company Summary

MasterLink will sell software that is designed to automate and simplify work process and workflow management. It is designed to uniquely permit transfer of essential information to the worker and allows management to manage more efficiently in a real time knowledge based system.

While MasterLink is useful in any work environment, the company will initially concentrate on the following domains:

1. Facilities Management
2. Healthcare
3. Aerospace
4. Communications
5. Utilities

These domains are characterized by a mix of manufacturing, and or service functions and will include both on site and or mobil work forces. This is not a mutually exclusive list. There are many other attractive domains that we will pursue such as entertainment and manufacturing.

2.1 Company Ownership

MasterLink is a "C" corporation. The principals include Kent A. Weisner, Garry Fenimore and John Hartman. The organization is structured to provide the essentials of management and technical expertise. There is a longer-term intention to take this enterprise public. The product growth potential is global.

2. 2 Startup Summary

See Attached Pro Formas. MasterLink must complete the late stage coding development. This will permit broader based applications since approximately 85% of the basic core are reusable. Each new domain application will require about 15% replenishment coding to complement the domain specification for each business category. Reusability is one of the benefits of the MasterLink design. The business specification tools provide the necessary input to lead the developers into proper system refinement for each new application. The costs are detailed in the proformas. They are briefly synopsized here to highlight the primary fiscal needs for the start up processes. The funding requirement is \$2.5 Million. Details are listed below.

1. Final stage coding (7 programmers plus 1 supervisor and a Q/A tester) total----\$1.2 million for 18 month development time.
2. Intelligence layer completion as part of the dual track development program will be completed within the first 6-8 months for this development phase.
3. Marketing costs (includes pre and post roll out expenses. \$1.0 million. This effort combines continuity with existing candidates as well as new client networking.
4. Sales expense \$0.3 million.

2. 3 Products and Services

MasterLink is a breakthrough in the direct management field. It is an event driven software tool that provides information needed by the work force, at the point of work or service on a real time basis. Everybody knows what to do and when to do it. Rules and policies plus job state target & task definitions permit management to be more specific in providing work instructions. MasterLink software is adjustable and extensible to the changing needs of the client company.

MasterLink personnel will provide installation and training for client users. Long term support is essential to user satisfaction. MasterLink fully intends to provide best practice advice to its clients in support of their internal efforts. Emancipation not dependency is one of MasterLink's deliverables.

In applications involving mobil work forces the knowledge based process centered system results in the following benefits:

1. Increased efficiency in every phase of a job life cycle.
2. Reduced personnel requirements, allowing for expanded workload or

redeployment of resources.

3. Better equipped mobil work force.
4. Improved mobil work force morale.
5. More timely availability of information at all levels of the resource hierarchy.
6. Improved customer satisfaction.

Any industry segment that is characterized by mobil work forces will find MasterLink an important addition to management/worker functionality.

2. 4 Company Locations and Facilities

MasterLink is currently located and operating at 3649 All American Blvd., Orlando, Florida 32810. Office space is currently adequate for initial development activities. This facility is expandable as management, sales, and marketing requirements increase.

3. 0 Products and Services

See 2.3

3. 1 Product and Service Description

MasterLink is a provider of software and management support services. The software is an event driven system that focuses on getting essential information to individuals performing work. In so doing, management becomes more effective and efficient and the work force improves its task completions in the most cost-effective manner. MasterLink keeps score and up dates "the how am I doing files on a real time basis". Both the worker and management have a regular and accurate sense of enterprise achievement.

MasterLink's interactive software provides real time information, where and as needed. Job tasks are completed more effectively and efficiently. This achieves the primary purpose of any enterprise. The software is a management tool. It controls costs; permits simulation ("what ifs"), advantageously alters systems behaviors, and keeps score. Information goes in from the bottom up (work status) and the top down (policy, rules, & job state, target and task definitions). The system processes are dynamically linked and constantly updated in real time, so everybody knows what to do. Everyone in the enterprise is able to judge the effectiveness of their contribution. Management can continually evaluate overall achievement of stated objectives and goals.

Generic by design, MasterLink crosses all lines and is applicable wherever work is performed. It is universal and opportunity is world wide in improving man's ability to perform work, as we know it.

MasterLink evolved by two fundamental disciplines; object oriented framework technology and behavior controlled agent technology. These drive our definition

& rules based expert system used to control job state transitions.

To accommodate transition and utilization of existing legacy systems MasterLink has in development a slide in intelligent layer that integrates with existing M I S to raise current systems to a higher level of performance.

MasterLink represents a distinct philosophy of organizational workplace management and its core is facility management (facility being defined as any infrastructure, physical or logical, that enables enterprise activities). Enterprise endeavors are viewed as "chains of activity". These chains have specific beginnings and endings that, depending on how well they are coupled with each other, are directly related to overall success of the enterprise.

An example of the problem is mobil workers of the world cannot access the information needed to complete work assignments efficiently. Existing data centric systems with disjointed records causes this and reduces management's ability to properly influence workflow process.

The solution is MasterLink software. This new technology transforms traditionally "inert" and disjointed records into "active records". These records, dynamically linked, become integral components involved in the work expediting process. The MasterLink provides mobil workers with hand held wireless access to information needed to perform job tasks (work) optimally in the most efficient, cost-effective manner. MasterLink automates and simplifies work using an event driven, knowledge based and process centered system.

See addendum MasterLink Products-Application Overview for an expanded view of breakthrough technology. (Pages 5 through 9 White paper)

3. 2 Competitive Comparison

We at MasterLink have extensively reviewed work process management software. We have found elements of Object Oriented Technology and Artificial Intelligence employed in some software offerings. These technologies have been used to achieve specific, narrowly focused business solutions in some companies. We have not turned up any software products that integrate system agents in the fashion of MasterLink. The MasterLink open architecture design provides flexibility and permits the enterprise to alter the policy and rules that direct the system behavior. A company can literally reinvent itself if needs and circumstance warrant dramatic change. Indeed MasterLink is structured to recognize the need for altering system behavior and signals that need to management by continually assaying the strengths and frailties of the business operations. The use of an intelligence layer is another unique feature. The MasterLink design utilizes agents to interface with legacy data and extract that which is useful to the conduct and behavior of the system.

should this be?

3. 3 Sales Literature

Promotional materials produced to date have been primarily used informational. The graphics and the accompanying descriptive product and services information were prepared for presentation purposes. These materials will remain central to an expanded promotional materials library that is being considered and will be developed as sales and marketing aids.

3. 4 Sourcing

The cost of providing the various services and charges for the installed MasterLink software is anticipated to vary substantially from client to client. A billable assessment, (designed to be folded into project cost following acceptance of the project by the client) is needed to establish the domain specification requirements. The specification process will define the scope, complexity and resource requirement to successfully install a functional MasterLink system. MasterLink should not be viewed as installable from a set of floppy discs or a CD. It is a sophisticated amalgam of human and machine coordination to achieve desired best practice in workflow process operations. The proformas included with this business plan detail cost and revenue streams from a mobile work force environment.

3. 5 Technology

There are two primary technology elements that have been employed in the open architecture design of MasterLink: Object Oriented Technology and Artificial Intelligence Agents. These elements are uniquely combined and employed to provide a decision methodology that automates the work process. The end result is a smooth delivery of essential information to the individual(s) doing work and permits management to manage the enterprise more efficiently. While neither of the integrating technologies is proprietary, the MasterLink design and open architecture as well as the core when coding is complete would be extremely difficult to duplicate. The key elements are the use of object-oriented frameworks and intelligent agents. These are unique to MasterLink. Another developer would find it difficult and time consuming to duplicate the MasterLink design. This leaves the window of opportunity open for MasterLink to take a commanding lead in the market place. (For more detail see our a Physical Architecture for a Distributed Workflow Management System)

3. 6 Future Products and Services

Masterlink will have an advanced position in the application of Object Oriented Technology and the use of Artificial Intelligence agents. The ability to package these as engines to drive specific application developments within an enterprise will become increasingly attractive to Masterlink and its customers. Quality management agents are perceived to be among those most in demand and will

contribute handsomely to an evolving product line utilizing OQ and A/I by MasterLink. *Policy management objects are now being designed and will provide more competitive advantages, on the drawing board is a contract management object which will be an auction tool for government contracting such as Lockheed Martin or Boeing/McDonald Douglas.*

4.0 Market Analysis Summary

MasterLink examined target markets on the basis of magnitude of potential. This software has application wherever work is performed, i.e., universally. Certain work domains clearly held our attention in terms of economic scope and diversity of application opportunities. In each of our selected markets, the number of segments and sub segments within a market were part of the "attractiveness quotient". Facilities management, Medical, AeroSpace and utilities were among the most attractive. Presentations, (concept selling) have been made to organizations including The University of Florida Shands Hospital, Lockheed Martin, Ro Teo Curran Care, The University Health Consortium and the ~~lawn and garden~~ maintenance industry. The existence of organizations with large remote and /or mobile work forces were also a marketing attraction for MasterLink. Market size and potential for Masterlink is clearly in the Billion Dollar ranges. Whether the size is 2 billion or 10 billion ^{it} is a pleasant opportunity.

4. 1 Market Segmentation

MasterLink will focus on specific pieces of the medium to large commercial facilities. We will concentrate on four basic types of facilities and users.

1. Corporate Facilities Department: Many corporations maintain large facilities for their manufacturing, retail, or high tech operations. Some of the bigger players include Lockheed Martin, Boeing, Bell South, Wal-Mart, and Deere & Company. The top 50 in this group own and operate facilities of over 300 million square feet.
2. Building/Owners/Management Firms: These are "full-service real estate firms capable of taking buildings from inception to market, leasing and management, and often disposal too. Big name players include Trammell Crow, Equitable RE Investment, and The Prudential. The top 100 firms in this class control facilities over 1.2 billion square feet.
3. Building Management Firms: The challenge of increased competition and reduced billings has given birth to a range of specialty niche managers and a new breed of national service providers. Top firms include Network Management, Koll Services, Cushman & Wakefield, JMB Realty, PM Realty, and CB Commercial. The largest 100 firms in this class control over 1.1 billion square feet.
4. Government Agencies/Universities: Not surprisingly universities, along with local, state, and federal governments, play a dominant role in the real estate market. Some of the biggest include the General Services Administration, Ogden

Government Services, State University of New York, State of Missouri, and Los Angeles County. These types of agencies maintain over 1.6 billion square feet.

Because of MasterLink's generic applicability we will pursue several different domains as highlighted in 2.0. Our target companies are large enough to need the high quality work automation simplification technology we offer. We will target entities with large mobil workforces (200-10,000) that require our product to achieve workforce automation.

4. 2 Industry Analysis

The commercial facilities market is in dire need of new technology to improve physical asset maintenance/management to satisfy their tenant/customer. The Commercial Facilities Industry represents over 40 billion square feet and spends over \$325 billion dollars in costs of operations. These expenditures do not include military or heavy manufacturing types. Global competition and collapse of the real estate of the late 80's and early 90's has brought full recognition to the importance of Facilities Management cost control and the necessity of productive efficiency.

4. 2. 1 Industry Participants

There are several competitors who sell Computerized Maintenance Management Systems (CMMS) and Computer Automated Facilities Management Systems (CAFM). A complete listing of these companies are available. They have failed to assist management and ownership in protecting their investments and have failed to meet user requirements in these key areas: implementation costs, manage effectiveness, return on investment, ownership costs, worker productivity, and worker satisfaction.

MasterLink's new leading edge technology solves the chronic problems of Facilities Management.

4. 2. 2 Distribution Patterns

We will use strategic partnerships in each work domain to access customers needs, sell, develop and implement our software and services nationally and globally. MasterLink is cutting new ground and distribution patterns will develop prior to rollout.

4. 2. 3 Competition and Buying Patterns

The major player in computerized maintenance management systems (CMMS) is Data Stream of Greenville, S. C. and they have over 40% of the business. Current CMMS systems are data centric, mostly a one-dimensional and according to an Aerospace Logistics Manager, woefully inadequate. Today, these systems are still

being sold because nothing else is available and people are continuing to get less of the information they need to do their work. Information accessibility in remote areas is a serious problem for mobil workers. Our market contacts from healthcare to aerospace have confirmed if a better product were available they would buy it. An aerospace manufacturer has confirmed they will use our product when available in both short and long range projects. They are limited in buying commercial off the shelf "cots" software a government contract regulation since 1994. Many businesses have been disappointed with software that does not perform. Competition has yet to produce a process centered knowledge based system with active records that provides real time information, at the point of work, ~~from a process centered system such as MasterLink.~~

MasterLink produced the framework infrastructure needed

4. 2. 4 Main Competitors

In terms of direct completion on a product similarity basis, MasterLink has no current competition. There are developers that are clearly aware of an emerging need. Work process operations are on a collision course with "data glut". Information necessary for the efficient discharge of tasks (work) are increasingly difficult to extract and transmit to the individual performing the work. Useful proprietary knowledge is often retained at the work level and never finds its way back into the management system. Each industry segment tends to have software suppliers that are "vendor acceptable". Our competitive evaluation indicates that vendors tend to approach customer solutions using a band aid approach. Software solutions frequently treat symptoms rather than route cause. MasterLink expects to have competition once the impact of its software is perceived. It is the company's intent to establish a major beachhead well in advance of significant competitive activity.

This is a huge opportunity for MasterLink in work flow management systems

4. 3 Market Analysis

See Market Analysis Summary. This topic will be expanded on at a later date.

5. 0 Strategy and Implementation Summary

Because of vendor preference in industry segments, MasterLink will seek strategic selling partners in each of its target markets. The domain specification requirement is a precursor to effective installations of MasterLink. This clearly supports the strategic partner approach. As a knowledge based system, it would require enormous time and effort for MasterLink to acquire the knowledge and sophistication for the variety of target markets it chooses to enter. We intend to partner with those who already have a successful sales and market presence in each targeted industry segment.

5. 1 Marketing Strategy

We are focusing on the medium to large business segment. Our users need to

contribute to market development

continually improve productivity. Our strategy is to highlight how MasterLink is an event driven management tool that delivers timely, required information to the mobil worker so they can do their job efficiently "achieve best practice". We will emphasize that MasterLink is a comprehensive management system targeted to achieve greater productivity from any business organization. A demonstration will dramatically represent how the heart of the system improves and simplifies the collection and distribution of operating information.

5. 1. 1 Target Markets and Market Segments

We will focus on Facilities Maintenance Management that is the software core for our comprehensive management system. The need for more sophisticated systems makes it a natural choice.

We will pursue:

1. Lockheed Martin Aerospace, Facilities Management.

They have a use for our product when completed in projects that are both short and long range.

2. Medical Facilities, i.e. Shands Hospital.

All medical facilities need help. Shands is a member of The University Health Consortium, which has as its members seventy of the largest medical schools in the country. Shands has agreed to be our beta site.

These two targets will be our launching pad. As our product is completed, our target markets will expand vertically and to other domains, as we are able to develop strategic partnerships to handle them.

For pricing see Pro Forma subscription sales and direct license sales.

5. 1. 2 Pricing Strategy

It is anticipated that the majority of sales will be from Subscription sales, however, direct license sales may reach as much as 30% or more of sales excluding set up fees. Subscription sales will eliminate initial cash outlay and protect the customers from hand held device obsolescence. It is anticipated that the hand held units will be trashed due to technological advances and this should enable us to leverage the preferred subscription sale.

Subscription Sales unit revenue is based upon \$250/month/seat or \$3,000/unit/year.

Unit/revenue

Price/Unit/Year (incl. set up) 3,000

Cost/Unit/Year

Variable:

Air Time 900

Server Time 300

Land Lines 300

Market Partners 300

Total Cost/Unit/Year 1,800

*that only have to pay for time
Time only to keep it
revenue. To get a
Commit to others
months.*

Fixed (set up)	500
Profit/Unit/Year	700

Direct License sales would be:

- @ \$500 for each Mobil unit.
- @ \$5,000 per server for every 25 units.
- @ 10% annual maintenance fee (based on

original Implementation Revenue)

Direct sales pricing is being studied and will be set to not materially affect financial results of the proforma.

The variable unit costs are decreasing due to technological advances and competition. Adjustments will be made as we go to market to accurately show true cost, maintain margins, and provide our customers with value delivered pricing.

This section is in development - see Pro forma.

5. 1. 3 Promotion Strategy

To maximize MasterLinks visibility and to leverage the product globally we have sought and received endorsements from two global leaders Mr. Philip Crosby, Author and father of Total Quality Management and Mr. Peter Schutz, former CEO of Porche A.G., a global management consultant and lecturer to YPO & TEC groups.

"MasterLink is a computer era breakthrough that lets management manage the operation while the workforce has the information to be fully utilized."

Philip Crosby, Author

"MasterLink is a comprehensive management system, targeted to achieve greater productivity from any business organization. It will be an -on line- method for everyone in the company to know -what is expected of me around here- in an active manner!"

Peter Schutz

High level endorsements and referrals will be two primary ways for us to achieve national and international recognition and account penetration. At the proper time, coordinated with product roll out appropriate press coverage for our breakthrough technology is available and will be sought. A press tour to assure national coverage is being considered but may not be necessary. Advertising expenditures will be minimized and low cost exposure will be pursued.

* Initially product and promotional literature will be produced to promote MasterLink. The \$25,000 budgeted for advertising will be spent in the first year primarily for this purpose.

* We will attend 6 trade shows and we are still evaluating which ones we will attend (2 for Technology, 4 for Sales & Marketing Development).

5. 1. 4 Distribution Strategy

We will partner with those that have a successful sales and market presence in each targeted domain. We will use these partners in each vertical domain to help us develop our accounts, implement, service, and distribute our products.

5.1.5 Marketing Programs

We must highlight the contribution of MasterLink's unique Architectural Framework created by advanced object-oriented and intelligent agent technologies. To do this we will use the following Marketing Programs *which are non exclusive*

* Executive Selling Program

-The challenge here is to develop a comprehensive executive selling program that conveys the MasterLink message in a non-threatening, and non-technical terminology. The value of MasterLink must be carefully communicated to assure acceptance.

* Value Delivery Partner Development Program

-MasterLink believes that the most efficient sales channels exist with current technology manufacturers and providers.

* Strategic Competitive Advantage Program

-Partners here would invest in the MasterLink Set to have exclusive rights within their vertical market, to utilize MasterLink to gain or maintain competitive advantage. MasterLink will be a "value partner" whose compensation will be based on the positive economic impact to the partners' enterprise, as defined by mutually agreed upon benchmarks.

*Industry Technology Innovator/Marketing Partner Program

- These partners will adapt MasterLink to their domain and partner with MasterLink to market new technology to their industry.

*Venture Development Program

- MasterLink will sell the rights for particular vertical implementation to this partner who would be free to apply this technology however they wanted. This partner will be able to use MasterLink as a technology booster, or develop a whole new business unit around the product set.

*Industry Trade Group Program

- Members through company sponsorships or individual memberships fund these organizations. The groups we will solicit such as: University of Health Consortium (70 large university hospital members) and Electric Power of Institute utilize member funding to develop new technologies that are made available to its members. This program will be designed to point out how MasterLink can add significant value to scenario because its foundational sign is generic, i.e., work management. We will show how easily MasterLink adapts to any vertical market by utilizing the "domain experts" within a given industry.

5. 2 Sales Strategy

1. Establish MasterLink in the market place.
2. Secure capital funds to code MasterLink.
3. Establish Value Delivery Partnerships.
4. Increase market awareness of breakthrough technology.
5. Sell our products and services beginning with client strategic evaluations, assessments, exploitation planning, software sale & implementation service, support, third party products, mentoring and technology transfer.
6. Establish MasterLink Collaborative Agent Workflow Framework as a "quantum leap" in providing competitive advantage. This is the first complete physical architecture for a distributed workflow management system. This was done by using advanced object orientation and intelligent agent technology.

5. 2. 1 Sales Forecast

Our sales projections are listed in our proforma income statement under revenue and in the cash flow statement under sources of funds. Sales are based on mobil worker subscription estimates per year. 80 % of current year subscriptions are assumed carried to the following year (20% attrition rate), and added to new unit estimates for that year.

A partner and customer/user of MasterLink achieve initial sales revenue of \$1,000,000.

Sales revenue is based on the average units per year (or total subscriptions as of July 1) times a per month/per unit cost of \$250 (\$3,000 annually).

Implementation revenue is a charge to a customer group to cover the cost of completing implementation for that customer. Starting year2, charges of \$250,000 per major new account are assumed.

Set up Fees are one-time charges per subscriber to cover the upfront costs of the remote device hardware and software. They are assumed paid when a new subscriber is added, at a price of \$1,500 for each new unit added that year.

5. 2. 2 Sales Programs

1. We will establish accounts by satisfying our beta site and securing endorsements and referrals from each implementation.

2. Establish MasterLink's unique quantum leap paradigm shift by getting this recognized nationally and globally. Approach the proper channels to secure last stage funding from a key investor, strategic partners and/or venture capital entity.
 3. Develop strategic vertical industry partnerships in each domain to market, sell, and implement MasterLink.
 - Land accounts in Industry Trade Groups, i. e. UHC & EPRI members
 - Medical Hospital Facilities Accounts
 - Utility Accounts
- Sales programs are more detailed in our white paper and it is available upon request.

5. 3 Strategic Alliances

We will seek strategic alliances and partnerships with the leader in each domain we decide to pursue. We intend to work with the domain "experts" in every market we enter.

We will require above average performance and reward delivery of partnership agreement goals. Partnership agreement documents are being developed.

Sales & Marketing responsibilities have been given to partner Kent Weisner and his company A-Tek Consultants, Inc. on a commission basis @ 15%. These commission figures are so noted in the proforma.

A-Tek has been supporting the efforts of MasterLink and will continue to do so to achieve our collective goals.

Our efforts for endorsements have paid off with the endorsement and continued support of Philip Crosby, Author, and Peter Schutz, Global Management Consultant.

The University Health Consortium has signed our non-disclosure agreement and given us a letter of support and encouragement because of the dire need of solutions a completed MasterLink could provide to the Home Healthcare industry and particularly to its members. A copy of their letter is attached.

5. 4 Service and Support

Support is very important in our corporate strategy. We will use the best available personnel for this responsibility. Server Support and Tech Support are provided for in the proforma under personnel. Our domain partners will also share in providing support to our customers for their respective domains.

5. 5 Milestones

6. 0 Management Summary

MasterLink Corporation is cautious in hiring new people. Our three founding partners are very loyal to each other and will be to those who we hire. Two part-time employees are used. Importantly, we have access, as required, to highly skilled technologists with deep root experience in the large-scale application of object and agent technologies.

Concurrent with funding our immediate plan is to hire 5 programmers. In the third month, we will need to hire 1 part-time QA tester who will roll to permanent as required. Coordinated with product and corporate development our staff will grow to 11 by the end of 1998. Three years from now, we should have a staff consisting of 23 employees excluding our sales force and support personnel which will grow as required to deliver the sales growth and support as the business is generated. The company will use its domain partners to large extent in developing sales and support. The additional hiring will be done to complete the final phase of product development, develop and penetrate our market, ~~and develop~~ ^{secure} partners, and manage the business operations.

6.1 Organizational Structure

The MasterLink organizational structure is designed to implement a philosophy that views the corporation from three functional areas, i.e., marketing/sales, administration, and product development/services, and three management levels within each, i.e., policy, control, and operations.

We intend to focus our entire organization on delivering the best possible service to all participants in the Value Delivery Chain. We will use the "best of the best" information technology and hire the highest caliber personnel available to remain extremely well managed.

6.2 Management Team

Garry Fenimore is the founder and president of MasterLink. Mr. Fenimore brings proven management skills from the industrial manufacturing, services, and real estate environments. He fulfills the essence of the domain expert, and is the inventor of the MasterLink design specification. He has 11 years experience as a technical facility specialist and one of his employers ~~were~~ The Siemens Corporation. His experience with computer aided facilities management (CAFM) and computer aided maintenance management (CMMS) led him to the conclusion that these systems were data centric, inhibited management innovation and led to increases in departmental costs. This led him to the creation of MasterLink.

John Hartman is chief technology officer for MasterLink Corporation. He brings 15 years of functional systems analysis, design, and project management skills. He is currently serving as Director of Systems Technology for a Fortune 500 company. As an advanced object and intelligent agent technology specialist he serves as the "advanced

I want his booklets title here

object and agent evangelist" for design methodology and technique in all production areas of MasterLink. He is the founding manager of his company's Common Object Technology Group, which is currently a key enabler in a \$30 million dollar, long-term strategic downsizing and client/server migration effort. The latest projects headed by Mr. Hartman are achieving dramatic results; with as much as 90% of program code being reused in new product releases.

Additional support is provided by Steven Beaver an object oriented software development specialist. He has designed, developed and implemented middleware which supports the basic functionality required to implement Business Applications in an object oriented environment. His work for The Technical Resource Connection, Inc. helped result in the sale of TRC to Perot in 1996. He brings additional expertise in Object Oriented and Artificial Intelligence Technology to MasterLink.

CEO and

Kent Weisner is in charge of business development for MasterLink. He brings 20 years of successful business management, business ownership and entrepreneurial and start up business experience. Typically, he has total dedication and commitment to achieve MasterLink's objective.

The principals of the company are supported by a number of highly skilled individuals possessing both technical and marketing capabilities. A-Tek Consultants, Inc. is a supplier of professional software services. This business is owned by Mr. Weisner and will be a source of support personnel for MasterLink.

6.3 Management Team Gaps

6.4 Personnel Plan

See Personnel listed on ProForma

6.5 Other Management Considerations

7.0 Financial Plan

See Pro Forma
~~MasterLink will be able to finance its own growth after product market introduction
through a recent of late stage funding.~~

7.1 Important Assumptions

See Pro Forma where Financial Assumptions are detailed.

7.2 Key Financial Indicators

MasterLink is a software startup. See Pro Forma for indicators

7.3 Break-even Analysis

see Pro Forma

7.4 Projected Profit and Loss

1.

7.5 Projected Cash Flow

2.

7.6 Projected Balance Sheet

3.

- fee?

*Do we need this?
Think Richard
will ask.*

7.7 Business Ratios

- fee?

Subject: MasterLink

Date: Mon, 03 Nov 1997 13:11:26 -0500

From: "Kent A. Weisner" <atek@gdi.net>

Organization: A-Tek Consultants, Inc.

To: Richard Licursi <licursi@pwgi.com>

Dear Richard,

Thanks to you and Barry for meeting with me on Friday.

You had previously asked me about use of funds and reports generation. I am not sure if I covered these adequately. Use of funds are shown in the Pro Forma financials I gave you Friday. We could detail more for you if you require it, in a use of funds statement.

The basis for generating reports is in the design and in MasterLink. We have designed all on what has to occur in workflow maintenance management. Regarding reports, we need the customer to tell us what they want the reports for then, the actual report generating programs will be inserted.

We are looking forward to hearing from you on Wednesday.

Best Regards,

Kent Weisner

Subject: Meeting...
Date: Wed, 03 Dec 1997 10:55:54 -0500
From: "Kent A. Weisner" <atek@gdi.net>
Organization: A-Tek Consultants, Inc.
To: Richard Licursi <licursi@pwgi.com>
CC: Barry Broskowitz <broskowitz@pwgi.com>

Richard,

Thank you very much for meeting with us yesterday. John and Garry enjoyed getting to know you. We appreciated your thoroughness. I have more information for you on PAS if you have time to receive it. Also, I need to speak to them again and would benefit from your experience and coaching regarding PAS i.e., the right kind of relationship-unrestricted license,etc.

Under separate cover I am sending 9 pages of market research information we did last year. Believe this will start to make you feel more comfortable on this subject. We can provide more current in-depth analysis if you wish to see more, we have it to share with you.

We are working on your question, "Where can this be in the next two years?"

John will have the plan emailed to Barry by Friday as agreed.

Kent

Kent Weisner
President
A-Tek Consultants, Inc.
<atek@gdi.net>
3649 All American Blvd.
Orlando
FL
32810-4726
USA

Work: 407-299-3900 or 1-888-299-9180
Fax: 407-299-8200

Berry Broadband Telecom 11-5-97 D/VN disclosure
Agreement

If we meet again,

change statement
unless we get you the
full party.

How much are you willing to share?

We need to understand what you are planning to do.

- ① Technically viable
- ② Financially viable Deliverable

- ③ All documentation

Email to Barry
Richard

Offence #641 * All design documents
Telecon

- ④ All design documents

Berry's copy of the design documents will be delivered tomorrow.

version John will be
bringing it with him when
we meet.

It has all the object models

It will give through

surveys and an understanding of what we

- ⑤ It weighs about 10 lbs. are doing.

Contains complete spec for objects, layers & methodology

This is probably

The ~~most~~ completely you probably it
does it this thoroughly. We did it for several reasons not to be done
in the easiest way we tried in less to convert to do the same.

This includes employees, strategic partners, partners etc. It is not just an expectation it is the requirement.

By the way, one ~~agent~~ we ~~are~~ developing is the ~~Agent~~ ^{are} Quality Manager. Another is the contract ~~Manager~~ ^{Manager} Agent.

Neither of these ~~exist~~ exist yet and are badly needed as quality is not being ^{managed} controlled as it ~~needs~~ should be, nor are contract costs being managed & controlled. Both of these areas are juicy opportunities that will fit right in with Masterfile's work process management automation.

Things added to Buy Plan - will bring revised copy.

Revised 3.5 Technology

Added 5.5 Milestones

Revised 3.6

Added 6.0 Mgt. Summary.

Revised 6.2 Mgt. Team

Added 6.3 Mgt. Team Profile

Added 6.4 Personnel Plan - will add more - refers to ProForms

Added 6.5 Other Mgt Considerations - fixtures listed

7.0 - 7.7 refers to ProForms & ProForms Annotations

MasterLink

Work Automation & Simplification

MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

Mr. Richard Licursi
Chairman & C.E.O.
Phoenix Wireless Group
2300 Maitland Center Parkway, Suite 200
Maitland, FL 32751

November 6, 1997

Dear Richard,

Today, upon your execution of our Non-Disclosure Agreement we are delivering to you the following:

1. The MasterLink complete specification including objects, classes, methodology, the logical design, all class diagrams, the data dictionary, and MasterLink Use-Case Scenarios. It should give you a thorough overview and an understanding of what we are doing. This is Garry Fenimore's only copy. It has been revised and John Hartman has the original copy. We would like this returned to us after you have had the opportunity to review it to your satisfaction. (no. of pages - plenty)
2. Revised Business Plan (19 pages)
3. Physical Architecture for a Distributed Workflow Management System (1 page)
System Architecture Overview (1 page)
The vision pages 1A, 2A, and 3A
4. The conceptual Specification (17 pages)

We believe you will find the specification and documentation exquisitely complete. We have received a number of compliments on the thoroughness and precision of our specifications and documentation.

We are looking forward to meeting with you next week for further dialogue and understanding. Because Garry Fenimore and John Hartman have to travel across the state an early evening or very late afternoon meeting would be preferred. With this accommodation, we could be available any day next week. The following week, the 18th is out for us.

Sincerely,

Kent A. Weisner
C.E.O.

cc: Mr. Barry Broskowitz, V. P. Operations, Phoenix Wireless Grp.

MasterLink

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MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

PROPOSED MEETING AGENDA

COMPANY PARTICIPANTS: PHOENIX WIRELESS AND MASTERLINK

WHERE: MASTERLINK OFFICES:

3649 ALL AMERICAN BLVD.
ORLANDO, FLORIDA 32810

WHEN: DECEMBER 2, 1997 @ 4:00 P.M.

Moderator, Kent A Weisner. Principal presenters: Kent A. Weisner

Garry Fenimore

John Hartman

Ken Woods Emerging Virtual Team

1. Introduction of participant personnel.
2. Masterlink in perspective, a brief review.
3. Product and services description.
4. The software design and how it functions.
 - a. Input functions
 - b. Output functions
5. Work flow management automation and simplification; how it is achieved through Masterlink.
6. Universal application; useful in all work environments.
7. The business plan overview.
8. Dialogue

Meeting recap and next step time table.

*gave Barry Exec Industrial ppt. diskette
" " Link process ppt. + PAS diskette*

" Richard & Barry Resource Based Estimates Year 1 to Develop Core Engine technology.

*gave Barry ^{hard} copy of PAS presentation but one received in B&W hard copy. Overview of PAS
" " Related copies of Competing for the future with Intelligent Agents*

Developing Estimating Systems with Intelligent Agent Technology

1. each the Bus Plan & ProForma/T87.

Send to Barry
P.P. Person

12-2-97 Meeting
@ 4 P.M. @ 3049 Allam

Someone to look & class

arrange meeting for us / Dec - 2 Tues
after Thanksgiving

4 P.M. at our place
All American Blvd.

Richard? about Bus Plan

Berry what's the product

(how info entered

" " comes out

Take him thru Flow

Walk thru main idea on both products

Put together an agenda in the next few days

1. Bus Plan
2. Product

POA —
Wireless
Brasilia
Cost? Staff? money?
Involves all the things we talked about

Where we #10 coming from on equipment, efficiencies
cost savings

Not passed out individually
amount of data within and help serve maximum
utilizing the HW & its physical limits of the connections.
Building the system to fit

Front to back product flow

input
output
mobility

John

Waterfowl biology Natural course

Project Plan

What has to happen to get to a physical representation.

Business Case once Product & market

"Solicitation with 1st complete demo

Waterlink Letterhead
Executive Meeting Agenda

December 2, 1997 @ 4 P.M. Masterplanners office
3649 All American Blvd.
Orlando, FL 32810

Introduction / ~~Test Drive~~

~~Richie DiCarlo~~

~~Barry Finkowski~~

for Waterlink Alortage: Why Waterlink?
~~Barry Finkowski~~? ~~Peter Stearns~~
Suey Denim
John Hartman CTO

~~Richie DiCarlo~~

Business Plan presentation / Question & Answer period

~~Test Drive~~

The Problem

~~Barry Finkowski~~

The Solution

High level PPT presentation : Brief & to the point message

~~Waterlink Product~~ — What is it?

~~John Hartman &~~
~~Barry Finkowski~~

~~Low level detail~~ How information is entered

~~Med. level~~ Show flowchart " comes out

~~High level picture~~

Physical Architecture for a We will take you thru the flow.

Job State Transition - John Hartman - We Mgt. Sys.

~~Productivity~~

Agent contribution to transition flow
one state transitions at different levels.

Increased efficiencies at the task level for the worker
" " " " " Generating ^{Job} (Scheduling
plan, Dispatch, Dof Mgt.)

Score is best

Change management

Dof Mgt.

to whole supervisor's spectrum as improved.

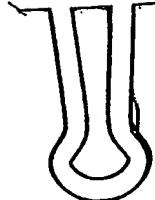
Ensures effectiveness of supervision without workers

... still or increased output without increasing staff or resources

Meeting Notes 12-2-87

reserves or course
Barry Brookowitz
Harry Feinman
John Hartman
LexWoods
Hank Coonan

N
I
V.



per Barry

Agent part very well designed

Planning & Scheduling not really well spelled out. Agreed and John explained why they seemed satisfied.

G.O.I how you get it in

How it comes out

G.O.I

John's answer yet to follow. users involved.
or core piece

Have you - G.O.I.

loading system with all the info
people involved

Barry-PAA will determine screens

in John Agents make intelligent decisions.

What are you going to do? → Object to unless per John
→ doesn't matter

Market Research then per Richard - We stumbled across,
wherever this be in the next 2 years?

Fin Plan concern Revenue spikes, changing R&D.

How to fix?

Concept Gallert Financials and how to move

→ can you implement? Yes

→ complicated build on to other - vendor guys would eat you up.

→ ML would license their software and them to build.

Paid in cap.? None.

Answers P3 #3
Resisting to change - 2 big blocks - may be slow stoppers.
1 Training subjects
2. redesigns - change.

Ricard

- Get our thoughts together

I need one more round tho, before the Vector can guys. They are good aggressive - looking for places to expand - a lot of merit

How does structure work.

"I'm interested on a personal basis."

Need True competitive analysis - references - Harry

Funding is short run or raise money right away.

Harry evolving Technology.

Structure that may be difficult with the other entity. Do it without them on route.

The sooner PSDA^{comes out of the back and becomes an entity} the better or MC do it itself might be better - PSD will fall apart - splitting who depends on

Need to understand their relationship better.

Next step - kicked until Monday. What we have come up with. them.

John plan by Friday.

Richard will call back on Monday 12/18/97.

MasterLink

Work Automation & Simplification

MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

"Personal & Confidential"

December 5, 1997

Mr. Richard Licursi
Chairman & C.E.O.
Phoenix Wireless Group
2300 Maitland Center Parkway
Suite 200
Maitland, Florida 32751

cc: Mr. Barry Broskowitz
Vice President, Operations

Dear Richard,

Yes, we have given considerable thought to the impediments that you mentioned relative to resistance to change. We recognize these difficulties. Organizations have traditionally developed operating cultures resistant to change. All too often these organizations suffer the economic consequences when they are late to adjust to changing patterns in the market place. It is our experience to date that there are a sufficient number of companies in a variety of work domains that recognize changing patterns. They are willing to and want to adjust to these changes but as yet don't have a road map. These are our target clients and MasterLink we feel is the solution. It is the needed map & tool, framework if you will, to maximize performance and provide effective change for both the workers & management in an enterprise.

We have also done a lot of what we believe to be significant pre-positioning of the product for potential clients and end users. To this end, we would appreciate your adding this to the MasterLink delivery column in addition to those we presented to you and Barry on December 2, 1997.

You will recall my mentioning Peter Schutz, the former CEO of Porsche AG, he is a global management consultant and a high level business contact resource for MasterLink. He regularly lectures on the need for corporate cultural changes in business. His lectures are frequently over subscribed. This validates our contention that there are a sufficient number of target opportunities for MasterLink. In addition to Peter Schutz, Philip Crosby has endorsed MasterLink as essential to new age enterprise success. We intend to use these two individuals to help spread the gospel.

By design, MasterLink intends to minimize change shock by utilizing much of the legacy data within the client's databases. The agent technology incorporated into MasterLink has the ability to extract appropriate and necessary information and to properly conduct the tasks; jobs, and functions of the enterprise. It is able to assemble input/output information that continuously provides a score card for the entire enterprise. An enterprise is infinitely more effective when: 1. Everybody has the information they require to work efficiently. 2. The quality of their individual contribution is known to them as well as to the management. 3. The overall enterprise performance is displayed as a sum of all work contributions. influence of
Everybody knows what is expected, what to do and how to get help.

When success is shared with those in the organization that contributed to that success that enterprise will become even more successful. This provides the contributors the answer to the question, "if I do what is expected and do it well, what's in it for me?"

direct the individual and conduct of their performing

Another key ingredient is to assist our clients in building a passion for success in the business of the enterprise. This is best accomplished by an accurate and self-sustaining definition of, "Why are we here?" When properly defined, the passion to achieve will raise performance to a higher level. Historically, organizations have had a very difficult time accurately answering the question, " why are we here?" Once this is accurately defined, passion to excel is more readily imbedded.

Immutably, old ways must give way to the new. Those who move with the flow will prosper. Those who sit on the sidelines will find survival difficult. MasterLink is positioning its services and software products to cushion the impact of change on an organization. The intent is to do this without hype and with well kept performance reality. The MasterLink design is modular. MasterLink is installable apiece at a time. Its efficacy is established well in advance of totality.

Hopefully, this will assist you in more completely sensing the enormity of the opportunity represented in MasterLink. MasterLink has the technology, the personnel, and the passion to succeed. It now needs the means to move ahead.

Very truly yours,

Kent A. Weisner
MasterLink Corporation

*Information from John
the Ringersway.*

Subject: MasterLink Competitive Analysis Comments

Date: Mon, 8 Dec 1997 07:38:06 -0500

From: "Garry L. Fenimore" <mlink@gte.net>

To: "Kent A. Weisner" <atek@gdi.net>

Dear Mr. Licursi,

Thank you for taking time to meet with the MasterLink team last week. We certainly enjoyed meeting you and Barry, and sincerely appreciate your interest.

During the meeting you expressed a desire to have more information related to the competitive market analysis that I did a few years ago. During that effort, I contacted more than fifty publishers of Computerized Maintenance Management Systems (CMMS), and received information from more than twenty of them. They have all taken the basic "here's a set of building blocks, now define your organization, equipment classification methodology, etc.". It is the "data centric" view, and not the "process" view that MasterLink adheres to.

All major desktop CMMS publishers such as DataStream, DPSI, JB Systems, CK Systems, PSDI, Mapcon, Omni Corp., HSB Reliability, and others, have taken the data approach. The cost to implement and manage their systems is very high, and they fail to deliver on promised improvements in productivity. Consequently, the market for CMMS remains very fragmented and characterized by "niche" players specializing in very narrow sub-markets, e.g., a small group of local school boards.

My exposure to mid-range systems (AS400 types) is limited, but I have seen systems such as J.D. Edwards'. They are even more constraining than the desktop group (because of programming architecture) and have failed to address business process.

Finally, one major reason the CMMS market analysis is of limited value is the fact that we are not just a CMMS. We are a generic work-flow management system that is process-focused, and enabled by intelligent agents. While we will ultimately replace them, we do not want to be categorized in a group that has such a limited future.

Please e-mail me if you have any further comments.

Regards,
Garry Fenimore

Kent,
Any Comments?

Subject: [Fwd: Comparative Analysis]

Date: Wed, 10 Dec 1997 08:41:13 -0500

From: "Kent A. Weisner" <atek@gdi.net>

Organization: A-Tek Consultants, Inc.

To: David Frier <duvie@earthling.net>, Garry Fenimore <mlink@gte.net>

Garry,

Here is John's input. Suggest you eliminate his first sentence and ending and compile it into a true competitive analysis that I can slide into the buzz pln. How about making your short note to Richard first and then end it with here it is as you requested.

Competitive Analysis:

We contacted more than fifty publishers - etc.

One more thing shouldn't we have something in it on CAFM's too? Request u add a little on it.

Thank you!

Kent

Subject: Comparative Analysis

Date: Tue, 09 Dec 97 12:06:00 PST

From: "Hartman, John" <John_Hartman@tvratings.com>

To: "ATEK" <atek@gdi.net>

Dear Mr. Licursi,

Thank you for taking time to meet with the MasterLink team last week. We certainly enjoyed meeting you and Barry, and sincerely appreciate your interest.

During the meeting you expressed a desire to have more information related to the competitive market analysis that I did a few years ago. During that effort, I contacted more than fifty publishers of Computerized Maintenance Management Systems (CMMS), and received information from more than twenty of them. They have all taken the basic "here's a set of building blocks, now define your organization, equipment classification methodology, etc.". It is the "data centric" view, and not the "process" view that MasterLink adheres to.

All major desktop CMMS publishers such as DataStream, DPSI, JB Systems, CK Systems, PSDI, Mapcon, Omni Corp., HSB Reliability, and others, have taken the data approach. The cost to implement and manage their systems is very high, and they fail to deliver on promised improvements in productivity. Consequently, the market for CMMS remains very fragmented and characterized by "niche" players specializing in very narrow sub-markets, e.g., a small group of local school boards.

~~My exposure to mid-range systems (AS400 types) is limited, but I have seen~~ systems such as J.D. Edwards'. They are even more constraining than the desktop group (because of programming architecture) and have failed to address business process.

Finally, one major reason the CMMS market analysis is of limited value ~~is~~ the fact that we are not just a CMMS. We are a generic work-flow management system that is process-focused, and enabled by intelligent agents. While we

will ultimately replace them, we do not want to be categorized in a group that has such a limited future.

Please e-mail me if you have any further comments.

Regards,
Garry Fenimore

I would like to add some perspective to what Garry has written. Indeed, some of the products mentioned above implement the ability to generate planned maintenance activity based on task frequencies, or to automate the scheduling process by associating the appropriately skilled resource with the tasks to be performed. The way in which these processes occur is dependent on the perceptions of the designers and programmers who built the product to perform these functions, and usually allow little if any flexibility. MasterLink, through the use of agents and the Policies which govern their behavior put the user in control of how these processes are implemented. Through the graphic user interfaces that allow for flexible modification of the rules and definitions that agents use to implement their roles, the determination of the way that work flow management processes occur is placed in managements' hands.

Another differentiator is the ability of MasterLink to define goals and objectives which become the basis for measuring the effectiveness of individual agent decisions, and the effectiveness of Policies overall. Thus providing a way for measuring whether the use of the system results in more productivity or cost savings with one Policy versus another.

A third distinguishing characteristic would be the use of state of the art architectures and software development methodologies. One of the basic tenets of object oriented development is that there is an acknowledgement that software, just as the real world, is in a continuous state of change.

We will be able to react to changes in the market place that have an impact on software quicker and with higher quality than older systems. Many of these existing systems have been around for quite a number of years and have only recently been converted to graphical user interfaces. The inherent weaknesses in those systems are therefore much more difficult to address, and this is one of the reasons that at each potential client we visited there was some level of dissatisfaction with their current systems.

Yours Truly,
John Hartman

Kent Weisner <atek@gdi.net>
President
A-Tek Consultants, Inc.

Subject: Fw: MasterLink Market Positioning

Date: Wed, 10 Dec 1997 10:52:27 -0500

From: "Garry L. Fenimore" <mlink@gte.net>

To: "Kent A. Weisner" <atek@gdi.net>, "Barry Broskowitz" <broskowitz@pwgi.com>

> From: Garry L. Fenimore <mlink@gte.net>
> To: Richard Licursi <licursi@pwgi.com>
> Subject: MasterLink Market Positioning
> Date: Wednesday, December 10, 1997 10:14 AM
>
> Dear Mr. Licursi,
> Thank you for taking time to meet with the MasterLink team last week. We
> certainly enjoyed meeting you and Barry, and sincerely appreciate your
> interest.
>
> During the meeting you expressed a desire to have more information
related
> to the competitive market analysis that I did a few years ago. During
that
> effort, I contacted more than fifty publishers of Computerized
Maintenance
> Management Systems (CMMS), and received information from more than twenty
> of them. It should be noted here that Computer Aided Facilities
Management
> (CAFM) are, as far as work management is concerned, essentially the same
as
> the CMMS products. Typically, they have more of an enterprise view toward
> overall asset/financial management that includes machinery, buildings,
> production equipment, etc..
>
> Both groups have taken the basic "here's a set of building blocks, now
define your organization, equipment classification methodology, etc.". It
> is the "data centric" view, and not the "process" view that MasterLink
> adheres to. Desktop CMMS publishers such as DataStream, DPSI, JB Systems,
> CKSystems, PSDI, Mapcon, Omni Corp., HSB Reliability, and others, have
> taken the data approach. The cost to implement and manage their systems
is
> very high, and they fail to deliver on promised improvements in
productivity. Consequently, the market for CMMS remains very fragmented
and
> characterized by "niche" players specializing in very narrow sub-markets,
> e.g., a small group of local school boards.
>
>
> John Hartman had some additional thoughts on the issue of "who we are".
>
> Indeed, some of the products mentioned above implement the ability to
generate
> planned maintenance activity based on task frequencies, or to automate
the
> scheduling process by associating the appropriately skilled resource with

> the tasks to be performed. The way in which these processes occur is
dependent on the perceptions of the designers and programmers who built

the
>
> product to perform these functions, and usually allow little if any
> flexibility. MasterLink, through the use of agents and the Policies
which
> govern their behavior put the user in control of how these processes are
> implemented. Through the graphic user interfaces that allow for flexible

> modification of the rules and definitions that agents use to implement
> their
> roles, the determination of the way that work flow management processes
> occur is placed in management's' hands.
>
> Another differentiator is the ability of MasterLink to define goals and
> objectives which become the basis for measuring the effectiveness of
> individual agent decisions, and the effectiveness of Policies overall.
> Thus
> providing a way for measuring whether the use of the system results in
more
>
> productivity or cost savings with one Policy versus another.
>
> A third distinguishing characteristic would be the use of state of the
art
> architectures and software development methodologies. One of the basic
> tenets of object oriented development is that there is an acknowledgement

> that software, just as the real world, is in a continuous state of
change.
> We will be able to react to changes in the market place that have an
> impact
> on software quicker and with higher quality than older systems. Many of
> these existing systems have been around for quite a number of years and
> have
> only recently been converted to graphical user interfaces. The inherent
> weaknesses in those systems are therefore much more difficult to address,

> and this is one of the reasons that at each potential client we visited
> there was some level of dissatisfaction with their current systems.
>
> Regards,
> Garry Fenimore & John Hartman



Work Automation & Simplification

MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

per Barry 29th or 30th @ 5PM,
• Set time
• Market Analysis coming along well some how, overall
stand on 29th?

Memorandum

DATE: December 12, 1997

TO: [Richard Licursi]

FROM: [Kent Weisner]

RE: [MasterLink 12-11-97 Telecon

Tentative 5:00 p.m. meeting Monday, December 15]

CC: [Barry Broskowitz]

We will respond to the concerns expressed by you during our telephone conversation. Have spoken to the team and we believe the meeting will go a long way to resolving the three big issues. At this end, we can make Monday at 5:00 p.m. work.

As a step toward expanding market analysis, you may recall me mentioning Lockheed Martin. The sender of this email to us from that company, manages an area of LMIS assigned to new leading edge technologies. One can expect that he would have a finger on the pulse of the O.O. and A.I. applications that would favorably impact his field of responsibility. Certainly, we have more on product and market analysis which we will be sharing with you next week.

Getting MasterLink and CIAK built is our primary focus and the team has agreed to unite as one company. The team has confidence a win win scenario(for you and the company) can be achieved.

Subject: [Fwd: MasterLink possibilities]
Date: Thu, 17 Jul 1997 10:14:39 -0500
From: "Kent A. Weisner" <atek@gdi.net>
Organization: A-Tek Consultants, Inc.
To: hartmajd@tvratings.com
CC: mlink@mail.gte.net

Garry and John,

Here is an e-mail from Randy Dougherty

Manager, Logistics Info Systems
Lockheed Martin Information Systems
12506 Lake Underhill Rd., MP 1270
Orlando, FL 32825-5002
Tel (407) 306-4812 Fax (407) 306-4010
email:randy_dougherty@ccmail.orl.mmc.com

The communication speaks for itself! Nice job!

Kent Weisner

Subject: MasterLink possibilities
Date: Mon, 14 Jul 1997 09:31 -0500 (EST)
From: Randy_Dougherty@ccmail.orl.lmco.com
To: atek@GDI.net

Garry,
Thank you for sharing your concepts for MasterLink work automation. As I stated in our meeting, the concepts which you presented to me have some very interesting possibilities for several upcoming projects that I am involved with for Lockheed Martin Information Systems. We are evaluating products which will assist in the maintenance of Lockheed Martin end-item products (aircraft, avionics end-items, etc). When you are able to advance your MasterLink concept beyond the initial requirements stage and provide an initial prototype, I am very interested in seeing how your concept is converted to a implementation prototype. The potential for Lockheed Martin Information Systems to utilize MasterLink to automate our maintenance management systems processing is very exciting to me.

Again, thank you for your briefing and please keep in touch as your prototype is developed.

Randy Dougherty
407.306.4812

LOCKHEED MARTIN

Randy Dougherty
Manager, Logistics Info Systems

Lockheed Martin Information Systems
12506 Lake Underhill Road, MP 1270
Orlando, Florida 32825-5002
Telephone 407-306-4812 Facsimile 407-306-4010
email: randy_dougherty@ccmail.orl.mmc.com

A-TEK CONSULTANTS, INC.

3649 All American Blvd.
Orlando, Florida 32810-4726

DATE: 12-12-97 TIME SENT: 1:15 p.m.

PLEASE DELIVER THIS FAX TO: Mr. Richard Lieursi and
Mr. Barry Broskowitz

COMPANY/LOCATION: Phoenix

PHONE: 407-667-1100 FAX: 407-667-1101

Message

TOTAL PAGES INCLUDING COVER PAGE: 3

FROM: Kent Weisner

PHONE: (407) 299-3900

FAX: (407) 299-8200

E-mail: atek@gdi.net

Market Analysis

We contacted more than fifty publishers of Computerized Maintenance Management Systems (CMMS), and received information from more than twenty of them. They have all taken the basic "here's a set of building blocks, now define your organization, equipment classification methodology, etc.". It is the "data centric" view, and not the "process" view that MasterLink adheres to.

All major desktop CMMS publishers such as DataStream, DPSI, JB Systems, CK Systems, PSDI, Mapcon, Omni Corp., HSB Reliability, and others, have taken the data approach. The cost to implement and manage their systems is very high, and they fail to deliver on promised improvements in productivity.

Consequently, the market for CMMS remains very fragmented and characterized by "niche" players specializing in very narrow sub-markets, e.g., a small group of local school boards.

Regarding, mid-range systems (AS400 types) such as J.D. Edwards', they are even more constraining than the desktop group (because of programming architecture) and have failed to address business process.

The CMMS market analysis is of limited value as we are not just a CMMS. We are a generic workflow management system that is process-focused, and enabled by intelligent agents. While we will ultimately replace them, we do not want to be categorized in a group
that has such a limited future.

Some of the products mentioned above implement the ability to generate planned maintenance activity based on task frequencies, or to automate the scheduling process by associating the appropriately skilled resource with the tasks to be performed. The way in which these processes occur is dependent on the perceptions of the designers and programmers who built the product to perform these functions, and usually allow little if any flexibility. MasterLink, through the use of agents and the Policies which govern their behavior put the user in control of how these processes are implemented. Through the graphic user interfaces that allow for flexible modification of the rules and definitions that agents use to implement their roles, the determination of the way that work flow management processes occur is placed in management's' hands.

Another differentiator is the ability of MasterLink to define goals and objectives which become the basis for measuring the effectiveness of individual agent decisions, and the effectiveness of Policies overall. Thus providing a way for measuring whether the use of the system results in more productivity or cost savings with one Policy versus another.

A third distinguishing characteristic would be the use of state of the art architectures and software development methodologies. One of the basic tenets of object oriented development is that there is an acknowledgement that software, just as the real world, is in a continuous state of change.

We will be able to react to changes in the market place that have an impact on software quicker and with higher quality than older systems. Many of these existing systems have been around for quite a number of years and have only recently been converted to graphical user interfaces. The inherent weaknesses in those systems are therefore much more difficult to address, and this is one of the reasons that at each potential client we visited there was some level of dissatisfaction with their current systems.

MasterLink

Work Automation & Simplification

MasterLink Corporation
3649 All American Blvd., Orlando, FL 32810-4726
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

Dear Richard & Barry,

Here is the next iteration on producing a development project plan and budget for MasterLink. I have enclosed a Gantt Chart identifying the major development iterations and the tasks within each iteration leading to the completion of both the MasterLink work management core, and the Facilities Maintenance application. This, as all project plans do, will evolve to reflect lower levels of detailed tasks within the ones now reflected. I have also included a resource sheet identifying the resources assigned to tasks within the plan, and a one page summary of development budget projections. The duration of tasks does not currently reflect any resource vacations or sick days, although major holidays are recognized as part of the standard Microsoft Project Calendar.

This represents only a product development plan, and does not reflect tasks associated with general business operations or marketing efforts. The budget information also represents only the estimates to support execution of the development plan, and does not include general business operating expenses or marketing expenses. The identification of that which is outside the scope of the development plan will be provided by Kent and Garry.

I hope this is an improvement over the first plan that we provided, and I look forward to your feedback.

Yours Truly,

John D. Hartman

MasterLink

Work Automation & Simplification

MasterLink Corporation
3849 All American Blvd., Orlando, FL 32810-4728
407/299-3900 • Fax 407/299-8200 • E-mail: atek@gdi.net

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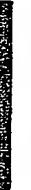
Yours Truly,



John D. Hartman

ID	Task Name	Duration	Start	Finish	Pred	March			April			M
						3/1	3/8	3/15	3/22	3/29	4/5	
1	Company/Project Initiation	26d	3/2/98	4/8/98								
2	Schedule Initial Meetings	1d	3/2/98	3/2/98								
3	Identify / Implement Operating Procedures	25d	3/3/98	4/18/98	2							
4	Identify / Hire lead developer	20d	3/3/98	3/30/98	2							
5	Conceptual Design Phase	60d	3/9/98	5/29/98								
6	Define System Architecture	10d	3/9/98	3/20/98	2FS+4d							
7	Identify/Procure Development Environment	15d	3/23/98	4/10/98	6							
8	Recruit Development Staff	20d	3/23/98	4/17/98	6							
9	Install Development Environment	5d	4/13/98	4/17/98	7							
10	Use Case Analysis & Review	20d	4/13/98	5/18/98	7							
11	Begin GUI Prototyping	20d	4/20/98	5/15/98	8,10SS							
12	Class Analysis/Design	25d	4/27/98	5/23/98	10SS+1							
13	Developer Training	10d	4/29/98	5/1/98	8,7							
14	Architecture Proof of Concept	15d	5/4/98	5/22/98	8,13							
15	Iteration 1	177d	5/11/98	1/12/99								
16	Identify Use Case Functions	5d	5/11/98	5/16/98	10							
17	Identify / Review Classes	20d	5/18/98	6/1/98	16							
18	Design and Review Sequence Diagrams	20d	6/1/98	7/1/98	17							
19	Identify component and distribution models	20	7/1/98	7/14/98	18							
20	Consulting	2d	7/15/98	7/16/98	19							
21	Facilities Domain Modelling	45d	6/1/98	7/31/98	12							
22	Define Policy Instances	1d	6/1/98	6/1/98	16							
23	Define JobWorks Schedule State Transition	5d	6/2/98	6/8/98	22							
Project: MasterLink Date: 1/22/98 12:58 PM		Task	Summary									
		Progress	Rolloved Up Task									
		Milestone	Rolloved Up Milestone									

Project: MasterLink
Date: 1/23/98 12:58 P



ID	Task Name	Duration	Start	Finish	Pred.	March					April				
						3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	4/26	5/3
24	Define Targets	5d	6/15/98	6/15/98											
25	Define Tasks & Skill Requirements	10d	6/16/98	6/26/98											
26	Define Resource Types	1d	6/30/98	6/30/98											
27	Define Rules for Agents	20d	7/1/98	7/26/98											
28	Consulting	3d	7/29/98	7/31/98											
29	Construction	100d	7/16/98	12/1/98											
30	Construct Interfaces	60d	7/15/98	10/6/98											
31	Construct Agents	75d	7/15/98	10/27/98											
32	Implement Rules	20d	10/28/98	11/24/98											
33	Construct Domain Classes	80d	7/15/98	11/3/98											
34	Construct Messaging	60d	7/15/98	10/6/98											
35	Construct Persistence	60d	7/15/98	10/6/98											
36	Construct Testing Modules	5d	11/25/98	12/1/98											
37	Integration/Systems Test	30d	12/2/98	1/12/99											
38	Iteration 2	124d	1/13/99	7/5/99											
39	Identify Issues From Integration Tests	2d	1/13/99	1/14/99											
40	Identify Use Case Functions	5d	1/15/99	1/21/99											
41	Identify / Review Classes	20d	1/22/99	2/18/99											
42	Design and Review Sequence Diagrams	20d	2/19/99	3/18/99											
43	Identify component and distribution models	2d	3/19/99	3/22/99											
44	Facilities Domain Modeling	31d	1/22/99	3/5/99											
45	Define Policy Instances	1d	1/22/99	1/22/99											
46	Define Job/Work/Schedule State Transition	1d	1/25/99	1/25/99											

Project: MasterLink
Date: 1/23/98 12:58 PM

Task
Progress
Milestone

Rolled Up Progress
Rolled Up Task
Rolled Up Milestone

ID	Task Name	Duration	Start	Finish	Pred	March					April				
						3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	4/26	5/3
47	Define Targets	5d	1/26/99	2/1/99	46										
48	Define Tasks & Skill Requirements	5d	2/2/99	2/8/99	47										
49	Define Resource Types	1d	2/8/99	2/9/99	48										
50	Define Rules for Agents	15d	2/10/99	3/25/99	49										
51	Consulting	3d	3/3/99	3/5/99	50										
52	Construction	55d	3/21/99	6/7/99											
53	Construct Interfaces	50d	3/23/99	5/31/99	43										
54	Construct Agents	30d	3/23/99	5/3/99	43										
55	Implement Rules	20d	5/4/99	5/31/99	54,55										
56	Construct Domain Classes	50d	3/23/99	5/31/99	43										
57	Construct Messaging	10d	3/23/99	4/5/99	43										
58	Construct Persistence	20d	3/23/99	4/11/99	43										
59	Construct Testing Modules	5d	6/1/99	6/7/99	55										
60	Integration/Systems Test	20d	6/8/99	7/5/99	52										
61	Alpha Iteration	104d	7/6/99	11/26/99											
62	Identify Issues From Integration Tests	2d	7/6/99	7/7/99	60										
63	Identify Use Case Functions	5d	7/8/99	7/14/99	62										
64	Identify / Review Classes	15d	7/15/99	8/4/99	63										
65	Design and Review Sequence Diagrams	15d	8/5/99	8/25/99	64										
66	Identify component and distribution models	2d	8/26/99	8/27/99	65										
67	Facilities Domain Modelling	28d	7/15/99	8/19/99											
68	Define Policy Instances	1d	7/15/99	7/15/99	63										
69	Define JobWorkSchedule State Transf	1d	7/16/99	7/16/99	68										
		Task	Summary					Routed Up Progress							
		Progress	Routed Up Task					Routed Up Milestone							
		Milestone													

Project: MasterLink
Date: 1/23/99 12:58 PM

ID	Task Name	Duration	Start	Finish	Pred	April						
						3/1	3/6	3/15	3/22	3/29	4/5	4/12
70	Define Targets	5d	7/1/99	7/23/99	6d							
71	Define Tasks & Skill Requirements	5d	7/25/99	7/30/99	70							
72	Define Resource Types	1d	8/2/99	8/2/99	71							
73	Define Rules for Agents	10d	8/3/99	8/16/99	72							
74	Consulting	3d	8/17/99	8/19/99	73							
75	Construction	15d	8/20/99	10/1/99								
76	Construct Interfaces	20d	8/30/99	9/24/99	66							
77	Construct Agents	15d	9/30/99	9/17/99	68							
78	Implement Rules	15d	9/20/99	10/8/99	77,73							
79	Construct Domain Classes	20d	8/30/99	9/24/99	66							
80	Construct Messaging	10d	8/30/99	9/10/99	66							
81	Construct Persistence	20d	8/30/99	9/24/99	66							
82	Construct Testing Modules	5d	10/11/99	10/15/99	78							
83	Integration/Systems Test	30d	10/18/99	11/26/99	75							
84	Beta Iteration	60d	11/29/99	3/1/00								
85	Identify Issues From Integration Tests	2d	11/29/99	11/30/99	83							
86	Identify / Review Classes	5d	12/1/99	12/7/99	85							
87	Design and Review Sequence Diagrams	5d	12/3/99	12/14/99	86							
88	Identify component and distribution models	1d	12/15/99	12/15/99	87							
89	Facilities Domain Modeling	10d	12/1/99	12/14/99								
90	Define Rules for Agents	10d	12/1/99	12/14/99	85							
91	Construction	36d	12/16/99	2/2/00								
92	Construct Interfaces	15d	12/16/99	1/5/00	88							

Project: MasterLink
Date: 1/23/98 12:58 PM

Task Progress Milestone Summary Rolled Up Task Rolled Up Milestone

ID	Task Name	Duration	March				April				M				
			Start	Finish	Pred	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	4/26	5/3
93	Construct Agents	15d	12/16/99	1/5/00	88										
94	Implement Rules	15d	1/6/00	1/26/00	93,90										
95	Construct Domain Classes	15d	1/21/00	1/26/00	93,90										
96	Construct Messaging	5d	1/21/00	1/26/00	88										
97	Construct Persistence	15d	1/21/00	1/26/00	88										
98	Construct Testing Modules	5d	1/27/00	2/2/00	94										
99	Integration/Systems Test	20d	2/3/00	3/1/00	91										

Project: MasterLink Date: 1/23/98 12:58 PM	Task	Summary	Rolled Up Progress
	Progress		
	Milestone		

Page 5

2 Schedule Initial Meetings

At project and company start up there will be significant initial coordination of meetings to identify all actions and tasks necessary to establish the company as an operating entity. The results of this task would subsequently be reflected in this plan, and meetings and actions will become predecessors to certain tasks within the plan being started.

3 Identify / Implement Operating Procedures

The logistics and standard operating procedures between the relevant parties must be agreed upon at start up. This will include formalization of such items as schedules for status reporting, vehicles/tools for tracking progress and resolving issues, involving and payment terms, administrative responsibilities, set up of bank accounts, etc. This must be in place prior to additional resources being hired and before true operation of the company can begin.

4 Identify / Hire lead developer

This is the lead technical resource to assume responsibility for day to day management of MasterLink developers and the key person to work with John Hartman. This resource must be involved in the "Conceptual Design" phase as soon as possible. This individual may be one for which some portion of an equity reserve would be allocated.

5 Conceptual Design Phase

Although labeled a "Conceptual Design", our impressions are that this is actually a little more. We would have to get down to the physical level in respect to the "System Interfaces" task below, and to be capable of building the initial "Prototype" functioning version. Those designs which don't relate directly to interfaces between system components can be considered a black box by the development entities not responsible for building them, and would not require such rigor during this phase. As a result, this design phase is of significant duration and key to the success of the project as a whole.

6 Define System Architecture

The client and server hardware and operating system environment must be specifically identified, and include designation of Operating System versions to be utilized for initial development. This will also identify all major application software components and identify what language and development tools will be used for each. This will include specification of network transport layers and protocols, persistence mechanisms (DBMS), and existing libraries such as ILOG to be used. This must be reviewed and agreed to by all principles prior to any procurements for a development environment. The lead developer will be involved assuming he has been hired. If not we will not wait to complete this task.

7 Identify/procure Development Environment

This represents the task of selecting products and vendors, negotiating support agreements, etc. based on the approved system architecture. There will be some lead time on receipt of all of the components. Physical space and logistics will need to be finalized. Some items may be payment deferrable, such as software libraries, but we should anticipate some significant cash flow to complete this task. The lead developer will be involved assuming he has been hired. If not we will not wait to complete this task.

8 Recruit Development Staff

Once we have approved the system architecture and identified the development environment, we can define the specific skill requirements and begin the recruitment for the remaining development staff. We will attempt to minimize the need for agency fee expenditures, but this may represent a risk factor. Hiring qualified technical personnel is very difficult in the current market, and getting good ones quickly is one of the keys to early project milestones being achieved. I will need the Lead Developers assistance with this task so he must be on board by this time, and this plan identifies a start of 5 in addition to the Lead Developer.

9 In staff Development Environment

The development environment must be installed and configured prior to any significant construction effort by developers. If any of the development staff positions are filled by this time, they will assist with this task.

10 Use Case Analysis & Review

This task will define the required end user and system interfaces to the MasterLink system. There are many use cases that already exist as part of the current collection of design artifacts, and this means that this task is largely a review and enhancement to those use cases. The body of use cases as a whole will represent the documented statement of MasterLink system requirements, and as such must be reviewed and approved before designs to provide solutions to those requirements can be completed.

11 Begin GUI Prototyping

Based on hiring of the primary GUI developer, and the finalization of some of the use cases from the predecessor task, we can begin to develop interface prototypes for review.

12 Class Analysis/Design

The MasterLink logical design will require additions / adjustments to react to new use cases that were not conceived of prior to the "Use Case Analysis" task above, and based on the approved system architecture to begin the addition of physical classes to the now logical models. This will involve such specific activities as finalizing the interfaces of the agents, updating existing class specifications w/ the physical definition of attributes, e.g. a Task Name defined as a Rogue Wave String with a constrained length, defining the component model which allocates classes to the binaries that they are destined to become part of, and creating the distribution model if processes are to be distributed across address spaces. In an object oriented project this is not normally done all at once, but in an iterative fashion as scope and functionality is expanded. This is more likely to be an on going task, but for purposes of submitting a plan at this early date we include this estimate for the initial effort. It is assumed that we have hired the primary server based and agent developer to be involved on this task, and these models should be reviewed and approved by relevant principals before any construction tasks are performed other than prototyping.

13 Developer Training

This is expected to be primarily training related to the use of ILOG libraries for developing intelligent agents. There may be other training required associated with other architectural components, but this is not explicitly reflected in the plan at this time.

This is the first construction task and does not attempt to implement any application functionality. It is a skeleton of a system that integrates all of the architectural components, both hardware and software, to validate that they function together correctly, and that the architecture will support the layering of the application on top of it. This will be maintained going forward so that as versions of architectural components change over time, they can be applied to this proof of concept deliverable before being applied to the system in development. This helps to avoid unexpected integration problems which can negatively impact development schedules.

15 Iteration 1
The first deliverable of specification functionality which should include some set of functions to exercise all major architectural components. This is not prototype code to be discarded, but rather an initial construction of a subset of all classes, with a subset of the interfaces of those classes to be implemented. Subsequent iterations build on additional functionality on iteration 1 classes and add additional classes until all functions and requirements have been delivered.

16 Identify Use Case Functions
This task determines the functional content of the deliverables for the development iteration and will be repeated for each iteration.

17 Identify / Review Classes
This is scoped by the previous task and is part of the on going Class Analysis/Design processes associated with object oriented iterative development.

18 Design and Review Sequence Diagrams
This task provides the details of inter class messaging to implement use case related functionalities. This is also part of the on going object oriented iterative development process, and is one of the primary inputs to the design review and approval process.

19 Identify component and distribution models
This task maps classes and interfaces to physical system binary components to be built across the clients and the server platforms.

20 Consulting
Certainly for iteration 1, and possibly for subsequent iterations, we will want to have some review and consultation with key vendor partners such as ILOG and ODI. The duration of these tasks would be shorter in the later iterations, if we deem them necessary at all.

21 Facilities Domain Modeling
This category of tasks is that which will be performed for each MasterLink Vertical Domain Application that we implement. We have a head start on this for Facilities Maintenance because that is what we have created a logical design for at this point. We will focus on the ones that we target for Iteration 1, then continually add to the scope of this in subsequent iterations. This is going to be an on going task that is part of each iteration of development. This duration is assumed to only be specific to the first iteration, and is likely to be shorter in subsequent iterations.

22 Define Policy Instances
The start of defining a work management environment to the system begins with identification of the Policies to be created. There can be one that governs work management of all resources and targets of work, or there can be many.

23 Define Job/WorkSchedule State Transitions
At a high level, the MasterLink components will make decisions which automate state transitions associated with Jobs and WorkSchedules. This task will define all the possible states and relationships between states which the MasterLink agents will be expected to manage.

24 Define Targets
This involves defining a target classification hierarchy, and the physical targets of work that will fall into the hierarchy. For Facilities Maintenance the classification system already exists in the form of the Construction Specification Institute standards. This task therefore will consist mostly of physical target identification needed to support the use cases to be implemented in this iteration of development. For clients we will have to create interfaces for entering physical target information.

25 Define Tasks & Skill Requirements
These are the tasks to be performed by skilled resources and applied to some defined targets. These will be placed in jobs that will go on workschedules that get dispatched to workers.

26 Define Resource Types
This is related to the task definitions and the staffs required to complete them.

27 Define Rules for Agents
The MasterLink agents will make decisions regarding actions to be taken which will affect the state of Jobs and WorkSchedules. These decisions are to be based on a user defined set of rules and constraints. This task will identify those rules and constraints to be implemented by the agents. This task may actually be more of an on going task, since the results of applying these will determine the behavior of the agents and impact the effectiveness of any given instance of Maintenance Policy.

28 Consulting
Certainly for iteration 1, and possibly for subsequent iterations, we will want to have some review and consultation with key vendor partners such as ILOG and ODI. The duration of these tasks would be shorter in the later iterations, if we deem them necessary at all.

29 Construct Interfaces
This represents the construction and unit testing of all the required user interfaces to the MasterLink system for the current iteration.

30 Construct Agents
This is the construction of the MasterLink intelligent agents utilizing the commercial libraries as a basis. This is expected to be the most complex, and therefore the longest, development effort of the

MasterLink components.

- 32 Implementation Rules
Once the agents are constructed then the rules to be used when the agents perform a state transition have to be created in the rules language syntax. Once we have an interface to allow rule creation by a user this task will not be needed.
- 33 Construct Domain Classes
This is a large volume of work to create the Facilities Maintenance Domain classes needed to support system functionality as stated in use cases. This is not difficult programming, but there is a lot of work to do.
- 34 Construct Messaging
Once the proof of concept integration of the message middleware has been completed, this is the development of all the distributed messages involving the MasterLink layer as either the sender or receiver. This will implement the externally published APIs for any MasterLink classes.
- 35 Construct Persistence
This task is to physically design and implement the data stores associated with the MasterLink persistent classes.
- 36 Construct Testing Modules
This task is to develop simulation code which will exercise the MasterLink API in representation of other system components.
- 37 Integration/Systems Test
This is an integrated test based on a test plan that will exercise all functionality and components of the system associated with the current iteration. Results are used to help define the next iteration's contents.
- 38 Iteration 2
- 39 Identify Issues From Integration Tests
The second deliverable of application functionality which should include most if not all functions to be included in the first marketable version.
- 40 Identify Use Case Functions
A review of the test results of the prior iteration will identify items to be resolved or changes to designs which will be designated as part of the current iteration.
- 41 Identify / Review Classes
This task determines the functional content of the deliverables for the development iteration and will be repeated for each iteration.
- 42 Design and Review Sequence Diagrams
This is scoped by the previous task and is part of the on going Class Analysis/Design process associated with object oriented iterative development.
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- 49 Define Resource Types
This is related to the task definitions and the skills required to complete them.

The MasterLink agents will make decisions regarding actions to be taken which will affect the state of Jobs and WorkSchedules. These decisions are to be based on a user defined set of rules and constraints. This task will identify those rules and constraints to be implemented by the agents. This task may actually be more of an on going task, since the results of applying these will determine the behavior of the agents and impact the effectiveness of any given instance of Maintenance Policy.

61 Consulting
62 Certainly for Iteration 1, and possibly for subsequent iterations, we will want to have some review and consultation with key vendor partners such as ILOG and ODI. The duration of these tasks would be shorter in the later iterations, if we deem them necessary at all.

63 Construct Interfaces
64 This represents the construction and unit testing of all the required user interfaces to the MasterLink system for the current iteration.

65 Construct Agents
66 This is the construction of the MasterLink intelligent agents utilizing the commercial libraries as a basis. This is expected to be the most complex, and therefore the longest, development effort of the MasterLink components.

67 Implementation Rules
68 Once the agents are constructed then the rules to be used when the agents perform a state transition have to be created in the rules language syntax. Once we have an interface to allow rule creation by a user this task will not be needed.

69 Construct Domain Classes
70 This is a large volume of work to create the Facilities Maintenance Domain classes needed to support system functionality as stated in use cases. This is not difficult programming, but there is a lot of it to do.

71 Construct Messaging
72 Once the proof of concept integration of the message middleware has been completed, this is the development of all the distributed messages involving the MasterLink layer as either the sender or receiver. This will implement the externally published APIs for any MasterLink classes.

73 Construct Persistence
74 This task is to physically design and implement the data stores associated with the MasterLink persistent classes.

75 Construct Testing Modules
76 This task is to develop simulation code which will exercise the MasterLink API in representation of other system components.

77 Integration/Systems Test
78 This continues the previous test effort by attempting to set up integrated test environments with other system components. This will require some detailed planning before the project reaches this point.

79 Alpha Iteration
80 This is a refinement and revision of Iteration 2, and should result in the first implementation that could be tested by potential clients. There should be little new functionality and this phase is where we would include any performance tuning and operational reliability tasks.

81 Identify Issues From Integration Tests
82 A review of the test results of the prior iteration will identify items to be resolved or changes to designs which will be designated as part of the current iteration.

83 Identify Use Case Functions
84 This task determines the functional content of the deliverables for the development iteration and will be repeated for each iteration.

85 Design and Review Sequence Diagrams
86 This task provides the details of inter class messaging to implement use case related functionalities. This is also part of the on going object oriented iterative development process, and is one of the primary inputs to the design review and approval process,

87 Identify Component and Distribution Models
88 This task maps classes and interfaces to physical system binary components to be built across the clients and the server platforms.

89 Facilities Domain Modeling
90 This category of tasks is that which will be performed for each MasterLink Vertical Domain Application that we implement. We have a head start on this for Facilities Maintenance because that is what we have created a logical design for at this point. We will focus on the ones that we target for Iteration 1, then continually add to the scope of this in subsequent iterations. This is going to be an on going task that is part of each iteration of development. This duration is assumed to only be specific to the first iteration, and is likely to be shorter in subsequent iterations.

91 Define Policy Instances
92 The start of defining a work management environment to the system begins with identification of the Policies to be created. There can be one that governs work management of all resources and targets of work, or there can be many.

93 Define Job/WorkSchedule State Transitions
94 At a high level, the MasterLink components will make decisions which automate state transitions associated with Jobs and WorkSchedules. This task will define all the possible states and relationships

between states which the MasterLink agents will be expected to manage.

- 70 Define Targets
This involves defining a target classification hierarchy, and the physical targets of work that will fall into the hierarchy. For Facilities Maintenance the classification system already exists in the form of the Construction Specification Institute standards. This task therefore will consist mostly of physical target identification needed to support the use cases to be implemented in this iteration of development.
- 71 Define Tasks & SMI Requirements
For clients we will have to create interfaces for entering physical target information.
- 72 Define Resource Types
These are the tasks to be performed by skilled resources and applied to some defined targets. These will be placed in jobs that will go on workschedules that get dispatched to workers.
- 73 Define Rules for Agents
This is related to the task definitions and the skills required to complete them.
- 74 Consulting
The MasterLink agents will make decisions regarding actions to be taken which will affect the state of Jobs and Workschedules. These decisions are to be based on a user defined set of rules and constraints. This task will identify those rules and constraints to be implemented by the agents. This task may actually be more of an on going task, since the results of applying these will determine the behavior of the agents and impact the effectiveness of any given instance of Maintenance Policy.
- 75 Certainty for iteration 1, and possibly for subsequent iterations, we will want to have some review and consultation with key vendor partners such as ILOG and ODI. The duration of these tasks would be shorter in the later iterations, if we deem them necessary at all.
- 76 Construct Interfaces
This represents the construction and unit testing of all the required user interfaces to the MasterLink system for the current iteration.
- 77 Construct Agents
This is the construction of the MasterLink intelligent agents utilizing the commercial libraries as a basis. This is expected to be the most complex, and therefore the longest, development effort of the MasterLink components.
- 78 Implement Rules
Once the agents are constructed then the rules to be used when the agents perform a state transition have to be created in the rules language syntax. Once we have an interface to allow rule creation by a user this task will not be needed.
- 79 Construct Domain Classes
This is a large volume of work to create the Facilities Maintenance Domain classes needed to support system functionality as stated in use cases. This is not difficult programming, but there is a lot of it to do.
- 80 Construct Messaging
Once the proof of concept integration of the message middleware has been completed, this is the development of all the distributed messages involving the MasterLink layer as either the sender or receiver. This will implement the externally published APIs for any MasterLink classes.
- 81 Construct Persistence
This task is to physically design and implement the data stores associated with the MasterLink persistent classes.
- 82 Construct Testing Modules
This task is to develop simulation code which will exercise the MasterLink API in representation of other system components.
- 83 Integration/Systems Test
This continues the previous test effort by attempting to set up integrated test environments with other system components. This will require some detailed planning before the project reaches this point.
- 84 Beta Iteration
This is ready the first version intended for commercial sale and use by clients. It is labeled Beta only until we can get confirmation from an external client that it does what it is supposed to, and functions as advertised.
- 85 Identify Issues From Integration Tests
A review of the test results of the prior iteration will identify items to be resolved or changes to designs which will be designated as part of the current iteration.
- 86 Identity / Review Classes
This is scoped by the previous task and is part of the on going Class Analysis/Design process associated with object oriented iterative development.
- 87 Design and Review Sequence Diagrams
This task provides the details of inter class messaging to implement use case related functionalities. This is also part of the on going object oriented iterative development process, and is one of the primary inputs to the design review and approval process,
- 88 Identify Component and Distribution Models
This task maps classes and interfaces to physical system binary components to be built across the clients and the server platforms.

This category of tasks is that which will be performed for each MasterLink Vertical Domain Application that we implement. We have a head start on this for Facilities Maintenance because that is what we have created a logical design for at this point. We will focus on the ones that we target for Iteration 1, then continually add to the scope of this in subsequent iterations. This is going to be an on-going task that is part of each iteration of development. This duration is assumed to only be specific to the first iteration, and is likely to be shorter in subsequent iterations.

90 Define Rules for Agents
The MasterLink agents will make decisions regarding actions to be taken which will affect the state of Jobs and WorkSchedules. These decisions are to be based on a user defined set of rules and constraints. This task will identify those rules and constraints to be implemented by the agents. This task may actually be more or an on-going task, since the results of applying these will determine the behavior of the agents and impact the effectiveness of any given instance of Maintenance Policy.

92 Construct Interfaces
This represents the construction and unit testing of all the required user interfaces to the MasterLink system for the current iteration.

93 Construct Agents
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94 Implement Rules
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95 Construct Domain Classes

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96 Construct Messaging

Once the proof of concept integration of the message middleware has been completed, this is the development of all the distributed messages involving the MasterLink layer as either the sender or receiver. This will implement the externally published API's for any MasterLink classes.

97 Construct Persistence

This task is to physically design and implement the data stores associated with the MasterLink persistent classes.

98 Construct Testing Modules

This task is to develop simulation code which will exercise the MasterLink API in representation of other system components.

99 Integration Systems Test

This continues the previous test effort by attempting to set up integrated test environments with other system components. This will require some detailed planning before the project reaches this point.

MasterLink

ID	Resource Name	Initials	Group	Max. Units	Std. Rate	Ovt. Rate	Cost/Use	Accrue At
1	Garry Fenimore	GF		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
2	John Hartman	JH		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
3	Kent Weisner	KW		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
4	Barry Broskowitz	BB		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
5	Lead Developer	LD		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
6	GUI Developer	GD		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
7	Agent Developer	AD		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
8	Developer 4	D4		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
9	Developer 5	D5		1	\$0.00/h	\$0.00/h	\$0.00	Prorated
10	Developer 6	D6		1	\$0.00/h	\$0.00/h	\$0.00	Prorated

	OTO	Year 1	Year 2	Total
Salaries				
JH		100,000	100,000	
KW		75	75	
GF		75	75	
LD		75	75	
AD		75	75	
GD		60	60	
D4		60	60	
D5		50	50	
D6		50	50	
D7		50	50	
		670,000	670,000	1,340,000
Benefits @ 25%		167,500	167,500	335,000
Hardware	25,000			25,000
Software	75,000			75,000
Training/Consulting	30,000			30,000
Total				1,805,000

Subject: MasterLink Meeting 2-3-98, One Page MasterLink Overview & Crosby Meeting..
Date: Wed, 04 Feb 1998 12:50:39 -0500
From: "Kent A. Weisner" <atek@gdi.net>
Organization: A-Tek Consultants, Inc.
To: Richard Licursi <licursi@pwgi.com>
CC: Barry Broskowitz <broskowitz@worldnet.att.net>

Richard,

We are delighted that you want to do the MasterLink Development Project. I apologize for the departure but the time with Crosby was well spent.

Need to discuss with you some recent developments regarding contact with Ken Woods. At Barry's suggestion I have been pursuing him for possible MasterLink contribution. This has lead to some interesting thoughts for the use of A-Tek as a support vehicle for short and long term assistance for MasterLink. We need to talk.

Meant to give you the one page overview yesterday.

In brief, Crosby found great interest in the ability of MasterLink to measure the contribution of Quality Management within an enterprise. Each fall, the Crosby company has an annual meeting of their international sales organization. We have been invited to present the MasterLink prototype to them at that time. They recognized the ability of MasterLink to compress the communication link between upper management and the worker. We substituted compression for flattening which was a source of amusement during the meeting, i.e. (it is ok if you are flator, not so good if you are the flatee, paraphrases Philip Crosby) Another area of discussion included the possibility that they could promote MasterLink as part of the Crosby organization pitch. This is a interesting sales augmentation opportunity.

Kent

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base64

A-TEK CONSULTANTS, INC.

3649 All American Blvd.
Orlando, Florida 32810-4726
E-mail: atek@gdi.net

DATE: OCTOBER 7, 1997 TIME SENT: _____

PLEASE DELIVER THIS FAX TO: Mr. Gary Mann, Pres. Commercial Systems Group

LOCKHEED Martin I.S.

COMPANY/LOCATION: 12506 Lake Underhill Road, MP 856
Orlando, Florida 32825

PHONE: _____ FAX: 306-1204

Message :Dear Mr. MANN:

THE ORLANDO COMPUTER CONFERENCE OF 10/6/97 ENDED ON A PREDICTABLE MIX OF THE UPBEAT AND A CONTINUING PROMISE OF GOOD THINGS TO COME.

MASTERLINK © HAS THE ENVIABLE DISTINCTION OF WHERE IT IS GOING AND HOW BEST TO GET THERE. WE HAVE HAD THE RECENT GOOD FORTUNE OF OBTAINING THE USE OF OO DEVELOPMENT SOFTWARE THAT WILL SHORTEN CODING TIME AND EFFORT FOR ALL MANNER OF BUSINESS DOMAIN APPLICATIONS.

WE ARE MOST EAGER TO MEET AND DISCUSS THE WORK PROCESS IMPROVEMENT POTENTIAL INHERENT IN MASTERLINK ©. KENT WEISNER WILL BE OUT OF TOWN FOR THE BALANCE OF THIS WEEK. WE WOULD APPRECIATE SCHEDULING A GET TO GETHER THE WEEK OF 10/13/97 AT YOUR CONVENIENCE.

MASTERLINK © ---"MAKING THE WORLD A BETTER PLACE IN WHICH TO WORK"

TOTAL PAGES INCLUDING COVER PAGE: ONE

FROM: LEE G. KITCHEN

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